

---

# *Establishing and Enhancing Services for Childhood Cancer Survivors*

## LONG-TERM FOLLOW-UP PROGRAM RESOURCE GUIDE



**Children's Oncology Group Nursing Discipline  
Clinical Practice Subcommittee/Survivorship  
in collaboration with the Late Effects Committee**

**CureSearch**  
Children's Oncology Group



*Establishing and Enhancing Services for Childhood Cancer Survivors:  
Long-Term Follow-Up Program Resource Guide*

Children's Oncology Group Nursing Discipline  
Clinical Practice Subcommittee/Survivorship  
in collaboration with the Late Effects Committee

Editor: Wendy Landier

Copyright 2007 © Children's Oncology Group  
All rights reserved worldwide

The Children's Oncology Group grants permission to download *Establishing and Enhancing Services for Childhood Cancer Survivors: Long-Term Follow-Up Program Resource Guide* (including associated Appendices) from [www.childrensoncologygroup.org](http://www.childrensoncologygroup.org) or [www.survivorshipguidelines.org](http://www.survivorshipguidelines.org) and to print copies for individual and institutional use, as long as the following conditions are met: (1) Copies are not sold or distributed for commercial advantage, and (2) the Children's Oncology Group copyright and its date appear on the printed copies.

*DISCLAIMER: Every effort has been exerted to ensure that information contained in this reference is in accord with current recommendations and practice at the time of this publication. Though every effort has been made to ensure accuracy, the Children's Oncology Group and its affiliated organizations and member institutions disclaims all responsibility for any errors or omissions contained herein.*

# *Establishing and Enhancing Services for Childhood Cancer Survivors*

## LTFU PROGRAM RESOURCE GUIDE

---

---



### **EDITOR**

#### **Wendy Landier, RN, MSN, CPNP, CPON®**

*Chair, Survivorship Section, COG Nursing Clinical Practice Subcommittee  
Clinical Director, Center for Cancer Survivorship  
City of Hope National Medical Center, Duarte, California*

### **SECTION EDITORS**

#### **Scott Hawkins, LMSW**

*Pediatric Oncology Social Worker  
Helen DeVos Children's Hospital, Grand Rapids, Michigan*

#### **Marcia Leonard, RN, PNP**

*Coordinator, Late Effects Program, C.S. Mott Children's Hospital  
University of Michigan, Ann Arbor, Michigan*

#### **Kathleen Meeske, RN, PhD**

*Assistant Professor, Keck School of Medicine, University of Southern California  
Director, Health Outcomes and Cancer Control Research  
HOPE Program, Childrens Center for Cancer and Blood Diseases  
Childrens Hospital Los Angeles, Los Angeles, California*

#### **Susan Shannon, RN, MSN, CPNP, CPON®**

*Coordinator, "STAR" Late Effects Program  
Miller Children's Hospital, Long Beach, California*

#### **Aimee Sznewajs RN, MS, PNP**

*Survivorship Program Coordinator  
UCSF Children's Hospital, San Francisco, California*

### **COG LATE EFFECTS COMMITTEE**

#### **Smita Bhatia, MD, MPH**

*Chair, Late Effects Committee, Children's Oncology Group  
Professor and Chair, Division of Population Sciences  
City of Hope National Medical Center, Duarte, California*

#### **Kevin Oeffinger, MD**

*Project Liaison, COG Late Effects Committee  
Director, Adult Survivor Program  
Memorial Sloan-Kettering Cancer Center, New York, New York*

## CONTRIBUTORS

**Elaine Arbez, RN**

Cancer Care Manitoba  
Winnipeg, Manitoba, Canada

**Lisa Bashore, RN, MS, CPNP, CPON®**

Life After Cancer Program  
Cook Children's Medical Center  
Forth Worth, TX

**Susan Bock, RN, MSN, CPNP**

University of Wisconsin –  
Gundersen Lutheran  
La Crosse, WI

**Theresa Carbone, RN, MS, CPNP, FNP**

Long-Term Follow-Up Clinic  
Roswell Park Cancer Institute  
Buffalo, NY

**Clarita Carino, RN**

Newark Beth Israel Medical Center  
Newark, NJ

**Claire Carlson, RN, BSN**

Cancer Survivorship Program  
The Children's Hospital of Philadelphia  
Philadelphia, PA

**Jacqueline Casillas, MD**

Director, Life After Cancer Clinic  
UCLA Medical Center  
Los Angeles, CA

**Hope Ann Castoria, RN**

LTFU Program Coordinator  
Hackensack University Medical Center  
Hackensack, NJ

**Cindy Cochran, RN, MSN, PNP**

UT Southwestern Medical Center  
Children's Medical Center - Dallas  
Dallas, TX

**Rose Dunaway, RN, CPON®**

University of North Carolina  
Chapel Hill, NC

**Debra Eshelman, RN, MSN, CPNP**

After the Cancer Experience Program  
Children's Medical Center - Dallas  
Dallas, TX

**John Gates, MD**

Children's Hospital Central California  
Madera, CA

**Kristi Geib, PNP**

University of North Carolina  
Chapel Hill, NC

**Erin Hartnett, RN, PNP**

New York University Medical Center  
New York, NY

**Jeanne Harvey, RN, MS, PNP**

Washington University Medical Center  
St. Louis, MO

**Katharine Johnston, RN, APRN-BC, PNP**

Columbus Children's Hospital  
Columbus, OH

**Karen Kinahan, RN, MS**

STAR Late Effects Program  
Northwestern Univ. Medical Center  
Chicago, IL

**Kathy Martin, RN, CPNP**

Carolinas Medical Center  
Charlotte, NC

**Rebecca Martin, RN, MSN, ARNP**

MD Anderson Cancer Center  
Orlando, FL

**Charlene Maxen, RN, CNP, CPON®**

Akron Children's Hospital  
Akron, OH

**Barbara Mathis, RN, MSN, FNP, CPON®**

Newark Beth Israel Medical Center  
Newark, NJ

## CONTRIBUTORS

**Sal McKeel, RN**

Christus Santa Rosa Children's Hospital  
San Antonio, TX

**Ann P. McKenzie, RN, NP**

St. Christopher's Hospital for Children  
Philadelphia, PA

**Jill Meredith, RN, BSN, OCN®**

Driscoll Children's Hospital  
Corpus Christi, TX

**Revonda Mosher, RN, MSN, CPNP, CPON®**

Sinai Hospital of Baltimore  
Baltimore, MD

**Katy Murphy, RN**

Long-Term Follow-Up Clinic  
Children's Hospital of Wisconsin  
Milwaukee, WI

**Kirsten Ness, PT, PhD**

St. Jude Children's Research Hospital  
Memphis, TN

**Josee Pacifico, RN, BSc (N)**

McGill University/  
Montreal Children's Hospital  
Montreal, Quebec, Canada

**Amy Pasmann, RN**

Primary Children's Medical Center  
Salt Lake City, UT

**Angie Pemberton**

Children's Oncology Group  
Patient Advocacy Committee  
Jefferson City, MO

**Linda Rivard, RN**

POST Program  
Advocate Hope Children's Hospital  
Oak Lawn, IL

**Sheila Santacroce, APRN, CPNP, PhD**

School of Nursing and HEROS Program  
Yale University  
New Haven, CT

**Susan Shaw, RN, MS, PNP**

Kids Now Off Therapy Clinic  
SUNY Upstate Medical University  
Syracuse, NY

**Pamela Smith, RN, NP**

West Virginia University  
Charleston, WV

**Johanne Soucy, RN, B.Sc.N**

McGill University/  
Montreal Children's Hospital  
Montreal, Quebec, Canada

**Teresa Sweeney, RN, MSN, CPNP**

After Completion of Therapy Clinic  
St. Jude Children's Research Hospital  
Memphis, TN

**Genevieve Sylvain, RN**

HOPE Clinic  
The Children's Hospital  
Denver, CO

## REVIEWERS

**LaVette Bowles, RN, FNP**

UCLA Mattel Children's Hospital  
Los Angeles, CA

**Erin Hartnett, RN, MSN, CPNP**

NYU Medical Center  
New York, NY

**Barbara Lockart, RN, MSN, CPNP**

STAR Program  
Children's Memorial Hospital  
Chicago, IL

**Mary Baron Nelson, RN, MS, CPNP, CPON®**

Children's Hospital Los Angeles  
Los Angeles, CA

**Kathleen Ruccione, RN, MPH, FAAN, CPON®**

Chair, Nursing Discipline, Children's Oncology Group  
Children's Hospital Los Angeles, Los Angeles, CA  
Associate Professor of Clinical Pediatrics, Keck School of Medicine, USC

**Janet Veatch, RN, MN, CNS**

Veatch Solutions  
San Francisco, CA

**Karla Wilson, RN, MSN, FNP-C, CPON®**

Nurse Practitioner, Childhood Cancer Survivorship Program  
City of Hope National Medical Center  
Duarte, CA

**Terri Wolf, RN, BSN**

Pediatric Oncology Program  
Sutter Medical Center  
Sacramento, CA

# TABLE OF CONTENTS

<b>FOREWORD</b> .....	<b>x</b>
<b>INTRODUCTION</b> .....	<b>xii</b>
<b>SECTION 1: FOUNDATIONS FOR LONG-TERM FOLLOW-UP</b> .....	<b>1</b>
<b>THE IMPORTANCE OF LONG-TERM FOLLOW-UP</b> .....	<b>2</b>
Late Effects after Childhood Cancer.....	3
Research: Key to Determining Risks of Late Effects.....	4
Key Role of Nurse Practitioners in Long-Term Follow-Up.....	5
Long-Term Follow-Up Care.....	6
Resources for Long-Term Follow-Up Programs.....	7
<b>MODELS OF LONG-TERM FOLLOW-UP CARE</b> .....	<b>8</b>
Determining the Model of Care.....	8
Choosing a Model: Considerations.....	8
Cancer Center Models.....	9
Community-Based Models.....	10
Need-Based Models.....	10
Advantages/Disadvantages of Models.....	11
<b>TRANSITION ISSUES</b> .....	<b>13</b>
Phase I: Transition to Long-Term Follow-Up.....	13
Phase II: Transition to Adult Healthcare.....	13
<b>CHALLENGES/BARRIERS</b> .....	<b>14</b>
Knowledge Deficits – Survivors.....	14
Knowledge Deficits – Healthcare Professionals.....	14
Psychological Factors Affecting Follow-Up Care.....	14
Healthcare System Issues.....	15
Financial/Insurance Issues.....	15
Overcoming the Barriers/Challenges in Survivorship Care.....	15
Barriers to Risk-Based Healthcare.....	16
<b>SECTION 2: PROGRAM DEVELOPMENT</b> .....	<b>17</b>
<b>INITIAL CONSIDERATIONS</b> .....	<b>18</b>
Determining Program Goals.....	18
Assessing Institutional Needs.....	18
Assessing Resources.....	18
Identifying, Recruiting and Retaining Patients.....	19
Assessing Patient Needs.....	19
<b>DETERMINING PROGRAM PARAMETERS</b> .....	<b>20</b>
Initiation of Long-Term Follow-Up Care.....	20
Transition from Acute Care to Long-Term Follow-Up.....	20
Age Range/Age Limits.....	20
General versus Specialized Long-Term Follow-Up.....	21
Determining Frequency of Clinic Visits.....	21
Transition to the Adult Healthcare System.....	22
Resources for Assisting Patients with Healthcare Transitions.....	22

<b>BUILDING A MULTIDISCIPLINARY TEAM.....</b>	<b>23</b>
<b>PROGRAM FUNDING.....</b>	<b>24</b>
Sources of Funding.....	24
Potential Sources of Funding Assistance.....	25
What Works?.....	25
Third Party Payors.....	26
Listservs.....	26
<b>PROGRAM MARKETING.....</b>	<b>27</b>
<b>SECTION 3: DELIVERING LONG-TERM FOLLOW-UP CARE.....</b>	<b>28</b>
<b>CLINIC OPERATIONS.....</b>	<b>29</b>
Care Delivery Methods.....	29
Clinic Staff.....	29
Pediatric Nurse Practitioners: Scope of Practice.....	31
Clinic Space.....	32
Schedules.....	32
Clinical Databases.....	33
Forms and Supplies.....	33
<b>PREPARING FOR THE CLINIC VISIT.....</b>	<b>34</b>
Medical Record Review.....	34
Medical Record Issues.....	34
Screening Recommendations.....	34
Team Meetings.....	35
Preparing the Treatment Summary.....	36
<b>STRUCTURING THE CLINIC VISIT.....</b>	<b>37</b>
<b>POST CLINIC FOLLOW-UP.....</b>	<b>38</b>
Tracking Results/Information.....	38
Making Referrals.....	38
Summarizing the Visit.....	39
Standardizing Documentation.....	39
Managing Ongoing Communication.....	39
Patients Lost to Follow-Up.....	40
<b>BILLING AND FINANCIAL ISSUES.....</b>	<b>41</b>
Coding/Billing.....	41
Reimbursement Issues.....	42
Reimbursement for NPs.....	42
<b>SECTION 4: SURVIVORSHIP RESEARCH.....</b>	<b>43</b>
<b>CANCER SURVIVORSHIP RESEARCH.....</b>	<b>44</b>
<b>IDENTIFYING RESEARCH PRIORITIES.....</b>	<b>46</b>
Research Focus.....	46
Feasibility.....	46
Research Team.....	46
Regulatory Issues.....	46

<b>CONDUCTING SURVIVORSHIP RESEARCH.....</b>	<b>47</b>
Clinical Databases Set the Stage for Cancer Survivorship Research.....	47
Developing a Clinical Database.....	47
Regulatory Issues.....	49
Research Opportunities within COG.....	50
Currently Open COG Late Effects Studies.....	50
The Research Process.....	51
Development of a Research Project.....	53
Examples of Potential Funding Sources for Survivorship Research.....	54
Other Research Considerations.....	55
Building Research Partnerships.....	55
<b>SECTION 5: ISSUES IN SURVIVORSHIP.....</b>	<b>57</b>
<b>ADVOCACY.....</b>	<b>58</b>
Developing Advocacy Skills.....	58
Essential Skills.....	58
Advocacy: What, Why, How?.....	58
Parents and Patient Advocates.....	59
Common Survivorship Issues.....	60
Information and Resources for Survivors.....	63
<b>EDUCATIONAL ISSUES.....</b>	<b>65</b>
Educational Assessment and Planning.....	65
Educational Interventions.....	65
Legal Issues.....	66
Special Education Advocacy.....	66
<b>EMPLOYMENT ISSUES.....</b>	<b>67</b>
Vocational/Career Choice Considerations.....	67
Legal Issues Related to Employment.....	67
<b>INSURANCE ISSUES.....</b>	<b>70</b>
Obtaining Insurance.....	70
Legal Issues Related to Insurance.....	71
<b>REFERENCES.....</b>	<b>72</b>
<b>APPENDIX 1: COG RESOURCES.....</b>	<b>74</b>
<b>APPENDIX 2: INSTITUTE OF MEDICINE RECOMMENDATIONS.....</b>	<b>94</b>
<b>APPENDIX 3: SAMPLE FORMS AND LETTERS.....</b>	<b>98</b>

## FOREWORD

**M**any of us trace the roots of our hospitals' survivorship and transition programs back 25 to 30 years to the pioneering influence of individuals we worked with in the legacy cooperative groups (CCG and POG).<sup>1, 2</sup> I remember that in the 1970's, as treatment advances led to prolonged remissions in children with acute lymphoblastic leukemia, a new question arose: how long should maintenance therapy be given? Because part of the answer to that question depended on the potential long-term adverse effects of treatment and because reports of late effects were appearing in the literature, the first long-term follow-up protocol in the CCG (CCG-101L) was opened in 1980.<sup>3</sup> Participating institutions like mine needed to coordinate the evaluations required by the study (i.e., neuropsychologic testing, gonadal evaluation, ophthalmologic evaluation, thyroid evaluation, physical examination, reporting of any second tumor, history of inpatient hospitalizations). For many of us, that was our first foray into the world of establishing services for childhood cancer survivors. The experience showed us the importance of comprehensive late effects evaluations, and emphasized the difficulty of incorporating this type of follow-up care into routine outpatient off-therapy visits. In that sense, CCG-101L opened a Pandora's box of issues related to the workforce, resources, and systems needed to implement long-term follow-up care.<sup>4</sup> Meanwhile, the population of survivors continued to grow, and a heterogeneous group of long-term follow up programs using diverse homegrown models developed in response. Those of us who shared an interest in survivorship and transition eagerly sought each other out to compare experiences. We kept an eye on the literature, networked at conferences, and consulted each other by telephone and later by email and listservs. But we didn't have (and would have given our "eyeteeth" for) the practical assistance for developing and sustaining a long-term follow up program that's available between the covers of this *Resource Guide*.

There is no question that pediatric health care providers have led the way in survivorship care, education, and research. A partial list of milestones would include recognition of the incidence and impact of late effects among cancer survivors, dissemination of information and guidelines for follow up care, development of survivor "passports" in various formats, and publication of health education materials for survivors. Yet, despite a growing library of articles, books, and reports, as well as media attention to survivorship after cancer treatment, until now there has been no single guide to help interested health professionals and their institutions develop and enhance long-term follow-up services. This *Resource Guide* meets that need and represents one more milestone in survivorship care by pediatric oncology thought leaders and clinical experts.

For me, one of the special joys of working in pediatric oncology has been that colleagues far and wide always have been so willing to share their knowledge, insights, and experience. With the advent of the Children's Oncology Group in 2000 and the collaboration of the COG Late Effects Committee and the Nursing Discipline, a critical mass of shared survivorship expertise coalesced. I hope that you will join me in gratitude for all the individuals involved in this collaborative effort who generously contributed their time and survivorship savvy to put this much-needed *Resource Guide* at your fingertips, and that you will find it very helpful in your practice.

**Kathleen Ruccione, MPH, RN, FAAN, CPON®**  
COG Nursing Discipline Chair

## FOREWORD

**T**he last three decades have seen tremendous improvements in survival of children diagnosed with cancer, with the 5-year survival rate approaching 80%. This improvement in survival has resulted in a growing population of childhood cancer survivors. Use of cancer therapy at an early age can produce complications that may not become apparent until years later. Approximately two-thirds of the survivors of childhood cancer will experience at least one late effect, and about one-third will experience a late effect that is severe or life-threatening. Even more important is the observation that the risk of developing these long-term complications does not appear to plateau with time, hence the emphasis on long-term follow-up of childhood cancer survivors.

An especially high-risk population, childhood cancer survivors seek and receive care from a wide variety of health care professionals, including oncologists, medical and pediatric specialists, surgeons, primary care physicians, gynecologists, nurses, psychologists and social workers.<sup>5</sup> Providing appropriate health care for survivors of cancer is emerging as one of the major challenges in medicine. The challenge arises from the heterogeneity of this patient population treated with numerous therapeutic modalities in an era of rapidly advancing understanding of late effects. The Institute of Medicine has recognized the need for a systematic plan for lifelong surveillance that incorporates risks based on therapeutic exposures, genetic predisposition, health-related behaviors, and comorbid health conditions. Optimal healthcare delivery to this unique population requires the establishment of necessary infrastructure, including several key components:<sup>6</sup> (1) longitudinal care utilizing a comprehensive multidisciplinary team approach, (2) continuity, with a single healthcare provider coordinating needed services, and (3) an emphasis on the whole person, with sensitivity to the cancer experience and its impact on the entire family.

Academic settings allow for establishment of a specialized multidisciplinary follow-up team to care for large numbers of survivors; however, the paucity of such centers and their limited geographic access make these specialized centers an option only for survivors who live nearby or who can afford time and expenses in order to travel to a distant center. Until now, there have been no resources available that describe the process of developing a long-term follow-up clinic. Therefore, the development of a resource to help institutions provide the necessary follow-up in a comprehensive yet standardized fashion has been a priority of the Children's Oncology Group.

The Children's Oncology Group's *Long-Term Follow-Up Resource Guide* is an outstanding and much-needed review of the entire process required to establish the necessary infrastructure in order to conduct long-term follow-up by interested institutions. The material included in the *Resource Guide* represents the expertise of individuals who have successfully established such centers at their institutions, and therefore captures a wealth of experience from experts who have demonstrated successful execution of this endeavor at the local level. The text is practical and hence readily applicable across a variety of institutional settings and patient demographics. Finally, this piece of work, led by the COG Nursing Committee, with review and input from the Late Effects Committee, represents the consensus of national experts in this field, and is truly a success story in terms of how the total effects of such collaborative efforts equal greater than the sum of individual pieces. I believe that this landmark effort will greatly benefit institutions interested in initiating survivorship programs, and most importantly, will provide childhood cancer survivors with the standard of care that they deserve.

**Smita Bhatia, MD, MPH**  
**COG Late Effects Committee Chair**

# INTRODUCTION

**A**s more and more children survive childhood cancer, late and sometimes serious therapy-related complications continue to emerge. Ongoing care for long-term survivors is thus being recognized as an essential part of the cancer care continuum. Developing and implementing a long-term follow-up (LTFU) program for childhood cancer survivors can be challenging. It can also be deeply rewarding. In order to support the development of such programs, the Children's Oncology Group Nursing Discipline's Clinical Practice Subcommittee - Survivorship Section embarked on a collaborative effort with the Late Effects Committee to develop this practical guide. Under the leadership of a core group of dedicated editors, over 50 individuals participated in the development of this guide in order to provide a broad perspective reflecting a wealth of experience from a variety of LTFU programs affiliated with Children's Oncology Group institutions. Whether you are planning to establish a new LTFU program or to enhance an existing program, we are hopeful that you will find the information in this *Resource Guide* helpful.

This *Resource Guide* is organized in five sections, as follows:

## **1. Foundations for Long-Term Follow-Up:**

This section serves as an introduction that will assist those without a pediatric oncology or late effects background (such as hospital administrators or potential program donors) to understand the importance of LTFU for childhood cancer survivors. It can be used to provide justification as to why a LTFU program should be established (or why an existing program should be enhanced), and includes basic information regarding program organization and design, care delivery methods, transition issues, and challenges/barriers to delivering survivorship

care. This section is intentionally written at an introductory level so that those without a clinical background will easily be able to understand the issues discussed.

## **2. Program Development:**

This section is targeted to both healthcare professionals and administrators. Issues important in developing a long-term follow-up program are defined and discussed, and the reader is provided with information to assist in weighing options and setting parameters for a LTFU program that best meets the needs of individual institutions.

## **3. Delivering Long-Term Follow-Up Care:**

This section provides the "nuts-and-bolts" of how to organize and run a long-term follow-up clinic (including clinic operations, preparation for clinic visits and post-clinic follow-up). It is designed for use by healthcare professionals who will be directly involved in planning and delivering care in the clinic. The information may also be useful for administrators and others who will be supporting clinic operations.

## **4. Survivorship Research:**

This section describes methods for incorporating multidisciplinary survivorship research into LTFU programs. Topics include identification of research priorities, database development, regulatory issues, and research opportunities, including development of research partnerships and participation in Children's Oncology Group and other collaborative studies.

## **5. Issues in Survivorship:**

Common psychosocial, educational, and legal issues facing survivors (such as problems with employment or insurance, and the importance of advocacy skills) are discussed in the context of how these issues affect the services required by survivors in LTFU programs.

**Appendices:**

The appendices provide a wealth of resources available through the Children's Oncology Group and their affiliated institutions.

**Appendix 1** is a guide to several Children's Oncology Group (COG) resources that specifically address the long-term follow-up needs of childhood cancer survivors. It includes a sample from the COG *Long-Term Follow-Up Guidelines for Childhood, Adolescent, and Young Adult Cancers*, a sample patient education guide (*Health Link*) targeted to a specific guideline-related topic, copies of COG's *Summary of Cancer Treatment* templates (comprehensive and abbreviated versions), information about the *Late Effects Web Forum* (a web-based discussion board open to COG members), and information about the *Late Effects Directory of Services* (a web-based directory of LTFU programs at COG institutions).

**Appendix 2** provides a summary of the Institute of Medicine's recommendations for improving care and quality of life in childhood cancer survivors, and includes commentary regarding progress that has been made since the release of the report and ongoing challenges in survivorship care.

**Appendix 3** provides a generous sample of forms and letters used by established LTFU programs in their day-to-day operations, including clinical summary forms, annual questionnaires, history and physical forms, patient education checklists, forms for tracking test results, and assessment forms for use by multidisciplinary team members (such as social work, psychology, and nutrition). Sample patient appointment letters, insurance authorization letters, and follow-up letters to referring physicians are also included. Sincere gratitude is expressed to the institutions that generously agreed to share their sample forms and letters for inclusion in this *Resource Guide*.

We hope that the materials contained within this *Resource Guide* will be useful to you in your practice, and that as a result, you too will be able to establish or enhance a long-term follow-up program for childhood cancer survivors. We wish you well as you embark on this very worthwhile endeavor.

- Wendy Landier, Editor



***“The cancer experience is a process that extends throughout a lifetime, a looking glass through which all future health and illness behaviors of the survivor must be interpreted. . . .”***

***- Oeffinger, 2003<sup>6</sup>***

## SECTION 1: FOUNDATIONS FOR LONG-TERM FOLLOW-UP

EDITOR:

**Susan Shannon, RN, MSN, CPNP, CPON®**

*Coordinator, "STAR" Late Effects Program*

*Miller Children's Hospital, Long Beach, California*



## THE IMPORTANCE OF LONG-TERM FOLLOW-UP

Imagine being cured of a life-threatening childhood cancer only to discover that long-term health problems may develop as a result of the very treatments that cured the cancer. Such is the case for the estimated 270,000 childhood cancer survivors living in the United States today. . . .

*When Ian was nine years old, he was diagnosed with medulloblastoma, a malignant brain tumor. Curative therapy required treatment with surgery, chemotherapy and radiation. Prior to his diagnosis, Ian was a healthy, bright boy who was active in sports. After his diagnosis and treatment, Ian struggled with balance, coordination, and gastrointestinal problems. When Ian completed all of his treatment, he was able to return to the fourth grade, but he was thin and frail, and he required a wheelchair to help him get around and a tutor to help him learn. Keeping up with schoolwork was difficult, and balance and coordination continued to be an issue, particularly during physical education classes.*

*Fortunately, Ian is cured of his brain tumor. Despite his many challenges, with perseverance and hard work, he has managed to complete high school and recently graduated from a community college with a culinary arts degree. His love of cooking developed out of the necessity to overcome appetite loss associated with his treatment. Today, Ian continues to struggle with other effects related to his treatment, including cognitive deficits, short stature, hearing loss, hypothyroidism, thyroid nodules, and thinning of the hair, all of which are life-long challenges. He also remains at risk for additional problems such as osteoporosis, cataracts, kidney problems, hormone deficiencies, and second cancers.*

---

**O**ver the last three decades, survival rates for childhood cancer have improved dramatically, resulting in a large population of childhood cancer survivors. Today, with the help of chemotherapy, radiation, surgery, and improved supportive care, nearly 80% of children treated for cancer will become long-term (at least five year) survivors.<sup>5</sup> With approximately 20,000 children in the United States diagnosed each year with cancer, the number of individuals cured of cancer will continue to grow by more than 15,000 each year.<sup>7</sup>

As survival rates improved over the last several decades and children with cancer reached the second and third decades of life, it became increasingly clear that cure had not come without a price. Researchers confirmed that survivors were at risk for a multitude of chronic or late-occurring health problems caused by their cancer or its treatment, often referred to as “late effects.” Late effects can affect a survivor’s physical, cognitive, and psychosocial health, and survivors remain at risk for developing many of these late effects over time.

### Late Effects After Childhood Cancer

Treatment for childhood cancer can have a lasting effect on the brain, eyes, ears, lungs, heart, liver, gastrointestinal tract, kidneys, and bladder, as well as the skeletal, reproductive and endocrine systems. Survivors may face many challenges, such as learning and memory difficulties, anxiety, depression, hearing loss, cardiac dysfunction, cataracts, obesity, thyroid problems, infertility, and other medical problems, including second cancers. The risk of late complications depends on the survivor's diagnosis and the specific treatment that they received. Adverse health behaviors, such as smoking, drinking, and poor diet or exercise habits, may magnify the risk of developing some of these complications. Survivors may also face problems related to attaining their desired level of education, finding and holding a job, assuming expected societal roles, and other factors that can affect their quality of life.

Survivors at highest risk for late effects include patients treated for bone tumors, central nervous system tumors, and Hodgkin lymphoma. Survivors treated for bone cancer commonly experience disfigurement and functional limitations caused by amputations or other surgeries. Additional risks for these patients may include problems with fertility, heart and kidney dysfunction, and second cancers related to radiation and/or chemotherapy. Some patients treated for Hodgkin lymphoma experience lung damage, abnormal skeletal

growth and maturation, infertility, or hypothyroidism, and girls who received chest radiation are at increased risk of developing breast cancer. Young people with brain tumors are often the most severely affected, particularly if they received radiation and chemotherapy in addition to surgical removal of their tumor. Potential late effects for this group are numerous and include cognitive impairment, short stature, hearing loss, problems with balance and coordination, hypothyroidism, thyroid nodules, kidney damage and second cancers.

In addition to the many physical late effects that may develop in survivors of childhood cancer, there are also a host of psychosocial issues that may emerge. Long-term educational, social, behavioral, and vocational difficulties are all common. Furthermore, survivors may face barriers related to obtaining ongoing medical care, support, and surveillance for late effects; these services are critical to their efforts to attain optimal health. Obtaining gainful employment with adequate insurance coverage is crucial but often difficult, particularly for survivors who have cognitive impairments. Some survivors may not be able to obtain health or life insurance or may be forced to pay high insurance premiums because of their cancer history. Still other survivors may not be able to complete school or even minimal job training, placing the burden of care on their families and society.

***A recent report compared the health status of 10,397 survivors of childhood cancer treated from 1970 to 1987 with 3,034 of their siblings. Among the survivors, 62% had at least one chronic health condition, and 27% had a serious or life-threatening condition, such as stroke, heart disease, or kidney failure. Survivors were 54 times more likely to have a major joint replacement, 15 times more likely to have congestive heart failure or to develop a second cancer and 10 times more at risk for cognitive problems than their siblings. In fact, only about one in three survivors remained free of long-term problems related to their cancer diagnosis or treatment.***

***- Oeffinger et al. 2006<sup>8</sup>***

## Research is Key to Determining Risks of Late Effects in Pediatric Oncology

*Pediatric oncologists have long recognized the risk of late-occurring complications in childhood cancer survivors. The Late Effects Study Group, an international consortium of pediatric cancer centers, was organized in the early 1970s to track delayed complications in childhood cancer survivors. Led initially by Giulio D'Angio, MD and later by Anna Meadows, MD, the research conducted by this group established the relationship between many therapeutic exposures used for curative therapy in childhood cancer and the late toxicities associated with those exposures. The National Wilms Tumor Study Group (NTWS), the Pediatric Oncology Group (POG) and the Children's Cancer Group (CCG) have all made significant contributions in identifying late complication related to childhood cancer therapy. Today, this work continues to be carried out by the Children's Oncology Group (COG) and by researchers worldwide. Some of the key publications in the childhood cancer survivorship research literature to date include:*

- Meadows AT, D'Angio GJ. Late effects of cancer treatment: methods and techniques for detection. *Semin Oncol.* 1974 Mar;1(1):87-90.
- Proceedings of the National Cancer Institute Conference on the Delayed Consequences of Cancer Therapy. Proven and Potential. *Cancer* 1976; 37:999-1936.
- Li FP, Stone R. Survivors of cancer in childhood. *Ann Intern Med.* 1976 May;84(5):551-3
- Meadows AT, D'Angio GJ, Mike V, Banfi A, Harris C, Jenkin RD, Schwartz A. Patterns of second malignant neoplasms in children. *Cancer.* 1977 Oct;40(4 Suppl):1903-11.
- Goorin AM, Borow KM, Goldman A, Williams RG, Henderson IC, Sallan SE, Cohen H, Jaffe N. Congestive heart failure due to adriamycin cardiotoxicity: its natural history in children. *Cancer.* 1981 Jun 15;47(12):2810-6.
- Meadows AT, Gordon J, Massari DJ, Littman P, Fergusson J, Moss K. Declines in IQ scores and cognitive dysfunctions in children with acute lymphocytic leukaemia treated with cranial irradiation. *Lancet.* 1981 Nov 7;2(8254):1015-8.
- Ochs J, Mulhern RK. Late effects of antileukemic treatment. *Pediatr Clin North Am.* 1988 Aug;35(4):815-33.
- Green DM, Donckerwolcke R, Evans AE, D'Angio GJ. Late effects of treatment for Wilms tumor. *Hematol Oncol Clin North Am.* 1995 Dec;9(6):1317-27.
- Bhatia S, Robison LL, Oberlin O, Greenberg M, Bunin G, Fossati-Bellani F, Meadows AT. Breast cancer and other second neoplasms after childhood Hodgkin's disease. *N Engl J Med.* 1996 Mar 21;334(12):745-51.
- Kadan-Lottick NS, Robison LL, Gurney JG, Neglia JP, Yasui Y, Hayashi R, Hudson M, Greenberg M, Mertens AC. Childhood cancer survivors' knowledge about their past diagnosis and treatment: Childhood Cancer Survivor Study. *JAMA.* 2002 Apr 10;287(14):1832-9.
- Pui CH, Cheng C, Leung W, Rai SN, Rivera GK, Sandlund JT, Ribeiro RC, Relling MV, Kun LE, Evans WE, Hudson MM. Extended follow-up of long-term survivors of childhood acute lymphoblastic leukemia. *N Engl J Med.* 2003 Aug 14;349(7):640-9.
- Oeffinger KC, Mertens AC, Sklar CA, Kawashima T, Hudson MM, Meadows AT, Friedman DL, Marina N, Hobbie W, Kadan-Lottick NS, Schwartz CL, Leisenring W, Robison LL; Childhood Cancer Survivor Study. Chronic health conditions in adult survivors of childhood cancer. *N Engl J Med.* 2006 Oct 12;355(15):1572-82.

## The Key Role of Nurse Practitioners in Development of Long-Term Follow-Up Programs

*Advance practice nurses forged their role in the long-term follow-up of childhood cancer survivors shortly after the need for continued care of this vulnerable population was identified. The role of the Pediatric Nurse Practitioner (PNP) specializing in the care of children with cancer had its beginnings in 1965 at St. Jude Children's Research Hospital (SJCRH). At that time, PNPs received on-the-job training provided by the SJCRH medical director. The St. Jude program served as the inspiration for the PNP/O program developed by Jean Fergusson in Philadelphia in the 1970s. As much of the medical literature on late effects was published by Dr. D'Angio and Dr. Meadows, both from the Children's Hospital of Philadelphia (CHOP), assessing patients for late sequelae of treatment became an integral component of the Philadelphia PNP/O program.*

*The earliest nursing papers on the subject provide descriptions of "late effects" and guidance for nurses regarding how best to provide care for childhood cancer survivors. June McCalla at the National Cancer Institute and Jean Fergusson at CHOP contributed some of the first papers. Numerous other nurse authors (listed below) contributed to the description and development of the role of the NP in caring for childhood cancer survivors. Wendy Hobbie from CHOP has published widely on the topic, providing concrete theory, practical guidance and role definition, emphasizing the many-faceted components of advanced practice nursing in long-term follow-up care, including clinician/caregiver, educator, and researcher.*

- Greene PE, Fergusson JH. Nursing care in childhood cancer: late effects of therapy. *Am J Nurs.* 1982;82(3):443-6.
- Ruccione K, Fergusson J. Late effects of childhood cancer and its treatment. *Oncol Nurs Forum.* 1984;11(5):54-64.
- McCalla JL. A multidisciplinary approach to identification and remedial intervention for adverse late effects of cancer therapy. *Nurs Clin North Am.* 1985;20(1):117-30.
- Leonard MA, Waskerwitz MJ. Late effects in adolescent survivors of childhood cancer. *Semin Oncol Nurs.* 1986; 2(2) 126-132.
- Fergusson J, Ruccione K, Hobbie WL. The effects of the treatment for cancer in childhood on growth and development. *J Assoc Pediatr Oncol Nurs.* 1986;3(4):13-21.
- Hobbie WL. The role of the pediatric oncology nurse specialist in a follow-up clinic for long-term survivors of childhood cancer. *J Assoc Pediatr Oncol Nur.* 1986;3(4):9-12, 24.
- Fergusson J, Ruccione K, Waskerwitz M, Perin G, Diserens D, Nesbit M, Hammond GD. Time required to assess children for the late effects of treatment. A report from the Childrens Cancer Study Group. *Cancer Nurs.* 1987;10(6):300-10.
- Hobbie WL, Hollen PJ. Pediatric nurse practitioners specializing with survivors of childhood cancer. *J Pediatr Health Care.* 1993;7(1):24-30.
- Harvey J, Hobbie WL, Shaw S, Bottomley S. Providing quality care in childhood cancer survivorship: learning from the past, looking to the future. *J Pediatr Oncol Nurs* 1999;16(3):115-6.
- Landier W, Bhatia S, Eshelman DA, Forte KJ, Sweeney T, Hester AL et al. Development of risk-based guidelines for pediatric cancer survivors: the Children's Oncology Group Long-Term Follow-Up Guidelines from the Children's Oncology Group Late Effects Committee and Nursing Discipline. *J Clin Oncol.* 2004;22(24):4979-90.
- Ginsberg JP, Hobbie WL, Carlson CA, Meadows AT. Delivering long-term follow-up care to pediatric cancer survivors: transitional care issues. *Pediatr Blood Cancer.* 2006;46(2):169-73.

### Long-Term Follow-Up Care

Long-term follow-up programs and services are essential in order to address the unique needs of the growing population of childhood cancer survivors as they navigate the challenges of today's healthcare system. Prevention and/or early identification of complications are crucial in order to decrease the long-term health risks associated with curative treatment for childhood cancer. Although many long-term follow-up programs already exist, additional comprehensive, accessible services are needed to accommodate this ever-growing population of young people who are being cured of cancer.

Key services provided by LTFU programs should include:

- Monitoring for and managing physical late effects
- Providing health education to survivors regarding their diagnoses, treatment exposures, and potential late effects
- Providing referrals to specialists and resources as indicated
- Encouraging wellness and health promotion activities
- Addressing psychosocial needs of survivors and affected family members
- Assessing and providing intervention for educational and/or vocational needs
- Assisting with financial and insurance issues
- Guiding transition from pediatric to adult-focused healthcare
- Empowering survivors to advocate for their own healthcare needs
- Facilitating survivorship research

Survivors often lack knowledge regarding their cancer diagnosis, treatment, and potential risks for developing late effects.<sup>9</sup> Long-term follow-up programs can address these needs by providing survivors with information regarding their long-term health risks. Because the risk for many late effects increases over time and will likely be

exacerbated by co-morbidities related to the aging process, the importance of providing ongoing LTFU care for this population is clear. This necessity prompted the Institute of Medicine (IOM) to release a report detailing steps for improving care and quality of life for survivors of childhood cancer<sup>5</sup> (see Appendix 2, which includes comments regarding the progress that has been made since the report's release, and a discussion of ongoing challenges in survivorship care). The IOM report recognizes the need for risk-based lifelong healthcare integrating the cancer survivorship experience with the survivor's overall healthcare needs.<sup>10</sup> Each survivor's plan for lifelong screening and prevention should incorporate risks based on previous cancer history, treatment, genetic predisposition, lifestyle behaviors, and co-existing medical conditions, with an emphasis on surveillance for late effects, health promotion, and education regarding risk reduction.

Resources are now becoming available to guide LTFU care for childhood cancer survivors. The Children's Oncology Group (COG) has developed *Long-term Follow-up Guidelines for Survivors of Childhood, Adolescent, and Young Adult Cancers*<sup>11</sup> ([www.survivorshipguidelines.org](http://www.survivorshipguidelines.org)). These risk-based, exposure-related guidelines provide recommendations to direct follow-up care in this unique population. Patient education materials to complement these guidelines, known as "Health Links," have also been developed by COG in order to enhance LTFU care and health promotion for childhood cancer survivors.

It is essential that survivors receive appropriate education and screening so that late effects can be recognized at their earliest, most treatable stage. LTFU programs, whether large or small, can be instrumental in providing these much-needed follow-up services to childhood cancer survivors.

## Resources for Long-Term Follow-Up Programs

### Textbooks:

- Schwartz CL, Hobbie WL, Constine LS, Ruccione KS (Editors): *Survivors of Childhood and Adolescent Cancer: A Multidisciplinary Approach*. Heidelberg: Springer, 2005.
- Wallace WHB, Green DM (Editors): *Late Effects of Childhood Cancer*. London: Arnold, 2004.

### Institute of Medicine Report:

- Hewitt ME, Weiner SL, Simone JV (Editors): *Childhood Cancer Survivorship: Improving Care and Quality of Life*. Washington, DC: The National Academies Press, 2003.

### Clinical Guidelines:

- Children's Oncology Group *Long-Term Follow-Up Guidelines for Survivors of Childhood, Adolescent, and Young Adult Cancers*. Children's Oncology Group. Version 2.0, 2006. Available: [www-survivorshipguidelines.org](http://www-survivorshipguidelines.org).

### Patient Education Materials:

- Keene N, Hobbie W, Ruccione K: *Childhood Cancer Survivors: A Practical Guide to Your Future (2<sup>nd</sup> Edition)*. Sebastopol, CA, O'Reilly Media, Inc., 2007. (Currently available free of charge to "needy" patients at the following web address: [www.candlelighters.org/Book\\_Order\\_Form.pdf](http://www.candlelighters.org/Book_Order_Form.pdf))
- Children's Oncology Group *Health Links*, 2006. Available: [www-survivorshipguidelines.org](http://www-survivorshipguidelines.org)

*"A young woman cured of Acute Lymphoblastic Leukemia was having academic difficulties at the college level. Her father recognized that her scholastic challenges were related to her therapy, which had included cranial irradiation. This gentleman led the way to educate key medical personnel and the leadership of our parent organization about late effects of childhood cancer treatment and the importance of an organized program for follow-up and intervention.....It was our parent organization, 'Parents Against Cancer' which was instrumental in generating the funds needed to create our program."*

- Jerry Z. Finklestein, MD  
Pediatric Hematologist/Oncologist  
Miller Children's Hospital, Long Beach, CA

## MODELS OF LONG-TERM FOLLOW-UP CARE

**C**aring for the rapidly growing population of childhood cancer survivors requires both flexibility and creativity. Survivors represent a heterogeneous population with a wide range of diagnoses and treatment exposures, and the intensity of necessary follow-up varies from patient to patient. Survivorship care also requires a variety of approaches to meet the changing needs of survivors as they move through the lifespan, from childhood to adolescence and then into adulthood.

### Determining the Model of Care

There are a variety of models for delivering care to survivors, all of which have distinct advantages and disadvantages<sup>12</sup>. The model best suited for your institution depends in large part on the population of survivors served and the resources available in your facility. It can also be argued that the best model may vary from patient to patient, with those with the most complex treatment histories and at-risk treatment exposures requiring a more specialized level of care. Many survivors are thriving; their cancer treatment may have had little long-term impact on their current health status and specialized LTFU care in an oncology setting or specialized late effects clinic may not be a high priority in their lives. For other survivors with chronic health conditions or increased potential for treatment related sequelae, ongoing care is an integral part of their survivorship experience. Regardless of where the survivors from your institution fall on this continuum, all survivors require education about their health risks and ongoing screening for potential late effects that may occur as they age.

*No matter what model is chosen, an educated survivor who is empowered to be an active participant in their own life-long care is the cornerstone of all successful survivorship care.*

### Choosing a Model: Considerations

- How many survivors will be cared for in your institution's program?
- How large is the geographic catchment area that your institution serves?
- Is it convenient for patients to continue to return to your institution?
- How diverse is your survivor population (types of cancer diagnoses and treatment exposures)?
- Will the majority of patients seen by your institution have had minimal treatment exposures, or will you have more complex patients with exposures that place them at greater risk for the development of late effects?
- What resources (physical, personnel, financial) are available to your institution?

Finding a model for delivering LTFU care that works best for both your facility and your patient population requires careful consideration, with a focus on maximizing available resources to address the core goals of survivorship care in any setting. Practitioners have developed a variety of methods to address the healthcare needs of childhood cancer survivors. The key differences in these approaches lie in the physical location for care delivery and the type of healthcare practitioner who provides care, recognizing that the pediatric cancer center is not the only place suitable for LTFU. With the proper infrastructure for transition and education for healthcare providers, survivors can receive LTFU care throughout their lifespan, provided by a wide range of practitioners including oncologists, nurse practitioners, internists, and family practice physicians.

## Cancer Center Models

### **Primary Oncology Care:**

In this model, patients continue to see their treating oncologist in the oncology clinic. Although this model is often the most comfortable for the patient who has developed a relationship and a level of trust with the treating physician, the focus may remain on disease surveillance rather than the potential for late effects and associated opportunities for health promotion.

### **Specialized LTFU Clinic:**

This is probably the most common model for long-term follow-up, and the number of formal LTFU programs in COG is increasing each year. Examples include: Survivors of Childhood Cancer Clinic at UCSF Children's Hospital, the Perini Clinic at Dana Farber Cancer Institute, the After Completion of Therapy (ACT) Clinic at St. Jude Children's Research Hospital, the Survivorship Clinic at City of Hope, the Long-Term Follow-Up Program at Memorial Sloan Kettering Cancer Center, and the Cancer Survivorship Program at The Children's Hospital of Philadelphia.

The specialized LTFU program model involves transitioning the patient from the primary oncologist to a specialized LTFU team within the same cancer center, typically when the patient has been off active therapy for at least two years. The team provides expertise in the long-term effects of therapy and has a health promotion/wellness focus. This type of clinic is designed to examine and evaluate the patient as well as to provide risk-based screening recommendations and education about potential late effects. Periodic (often yearly) evaluations continue in this clinic for varying amounts of time. In some programs, the team provides support for transitioning the patient to adult-focused care; other programs follow patients for life. The patient is encouraged to establish an ongoing relationship with a community healthcare provider for routine healthcare needs.

### **Shared Care:**

In this model, a clinician specializing in LTFU is "embedded" within a specialized program (e.g., leukemia/ lymphoma, solid tumor) within the cancer center and directs the LTFU care for these patients. An example of this model is the LIFE Program (Long-Term Information, Follow-Up and Evaluation Program) at Childrens Hospital Los Angeles.

## Young Adult Transition Models

### **Formalized Transition Programs:**

Many pediatric institutions have upper age limits for care, recognizing that older survivors may not be able to receive appropriate care in a pediatric setting and that their needs may be better served in an adult-focused healthcare environment. Some pediatric academic institutions have successfully developed formal programs for young adult survivors in partnership with neighboring adult institutions. Examples include the ACE (After the Cancer Experience) Program for Young Adult Survivors (a partnership between Dallas Children's Medical Center and the University of Texas Southwestern), Living Well After Cancer (LWAC) Program at the Hospital of the University of Pennsylvania (a partnership between The Children's Hospital of Philadelphia and the University of Pennsylvania) and the STAR Program (Survivors Taking Action and Responsibility), a partnership between Children's Memorial Hospital and Northwestern University in Chicago. These clinics may be staffed by pediatric and/or adult oncology practitioners or with family practice or internal medicine physicians or nurse practitioners whose focus and expertise are the care of the pediatric oncology survivor. Patients are seen solely by these practitioners, and multidisciplinary referrals to other subspecialties are made on an as-needed basis, often to an established network of adult providers with knowledge of the specific needs and risks of this patient population.

**Adult Oncology-Directed Care:**

Another option for transitioning young adult patients is to refer them to an adult oncologist for LTFU. However, once minimal risk for disease recurrence has been identified, care is frequently transitioned to a primary care provider in the community.

**Community-Based Models**

**Community-Based Care:**

Armed with the appropriate knowledge of late effects related to childhood cancer treatment, pediatric and adult primary care practitioners can successfully provide LTFU care to survivors. In this model, the pediatrician, family practice physician, advanced practice nurse, or internist in the community provides LTFU care. Ideally, the community provider maintains close contact with the pediatric oncology team that provides, on a consultative basis, explanations regarding the patient's risk factors and updates regarding changes in screening recommendations. This model can be useful for both pediatric patients and for transitioning young adult survivors to community-based care. One example is the ACT Clinic at St. Jude Children's Research Hospital, which has been successful in helping survivors make the transition to community healthcare providers when the survivor reaches 10 years off therapy and is at least 18 years of age.

**Need-Based Models**

In the United Kingdom, models based on intensity of treatment are being explored to guide decisions about type and frequency of long-term follow-up for pediatric cancer survivors. Three levels of follow-up care have been proposed by Eiser et al.<sup>13</sup> and include: (1) "Level 1" follow-up by mail or telephone every 1 to 2 years for patients who had only surgical treatment or "low-risk" chemotherapy, such as Stage I or II Wilms tumor or germ cell tumors treated with surgery alone; (2) "Level 2" follow-up by nurse or primary care provider every 1 to 2 years for patients who received chemotherapy alone or chemotherapy with low-dose (<24 Gy) cranial irradiation, such as those with A.L.L. in first remission; and (3) "Level 3" follow-up in a medically supervised late effects clinic annually for patients who received any radiation (with the exception of low-dose cranial irradiation), and for patients who received "megatherapy," such as patients with stage IV tumors, brain tumors, or those who underwent bone marrow transplant.

Several models for providing care to childhood cancer survivors are summarized in Table 1, which includes advantages and disadvantages of each model.

*"At our institution, we started to get phone calls from our long term survivors who were no longer seeing their primary oncologist. Through websites and conversations with other survivors, patients and parents had heard about special programs just for survivors, and wondered if this sort of program existed at our hospital. Initially, we were referring patients to other facilities or to practitioners in the community. But then our Division started to wonder if we could and should be doing better.*

*Was this a missed opportunity and, more importantly, was there a way that we could improve the care we were offering to our long-term survivors? These kinds of questions led us to pull together a think tank of oncologists, nurse practitioners and administrators . . . we started to answer the questions: Who are our survivors? Where are they now? What do they need? We aren't the biggest facility in the area, but our pool of survivors was larger than we expected. We considered a partnership with another local children's hospital and with a family practice physician with interest in long term survivors. Before we knew it, we were taking the first steps to developing our monthly long term follow-up clinic, and laying the groundwork for a transition program for our young adults."*

*- University Hospital Program Administrator*

Table I: Models of Care: Advantages and Disadvantages of Various Types

MODEL	ADVANTAGES	DISADVANTAGES
<p><b>CANCER CENTER: Primary Oncology Care</b></p> <p>LTFU occurs as continuation of on-therapy experience with treating oncologist in pediatric oncology clinic</p>	<ul style="list-style-type: none"> <li>▪ Comfortable for patients and family who have developed relationship with treating oncologist</li> <li>▪ Continuity of care</li> <li>▪ Oncologists don't feel they have to "give up" their patients to another provider</li> </ul>	<ul style="list-style-type: none"> <li>▪ Provider attention may be distracted by acuity of on-therapy patients</li> <li>▪ Illness (not wellness) focus</li> <li>▪ Potential lack of provider interest in or knowledge of late effects</li> <li>▪ Relapse-focused follow-up rather than risk-adapted screening and health promotion focus</li> <li>▪ Research may be difficult to coordinate</li> </ul>
<p><b>CANCER CENTER: Specialized LTFU Clinic</b></p> <p>LTFU handled by a designated late effects team in a separate clinic within or outside of the pediatric oncology clinic setting</p>	<ul style="list-style-type: none"> <li>▪ Providers with expertise in late effects</li> <li>▪ Emphasis on improving survivor knowledge of cancer treatment and risk</li> <li>▪ Comprehensive risk-based screening and follow-up care</li> <li>▪ Continued connection with cancer center provides "comfort zone" for survivor</li> <li>▪ Focus on modifiable risk factors</li> <li>▪ Health education</li> <li>▪ Opportunity to train healthcare professionals</li> <li>▪ Access to established network of sub-specialists with commitment to survivor care</li> <li>▪ Structure for research</li> </ul>	<ul style="list-style-type: none"> <li>▪ Cancer center may have negative connotations for survivors who want to "move on"</li> <li>▪ Survivors may not feel comfortable in pediatric setting as they get older</li> <li>▪ May not be geographically convenient</li> <li>▪ May discourage survivor use of primary care</li> <li>▪ Protects patient from having to negotiate their own healthcare in the community</li> <li>▪ Requires multiple hospital resources</li> <li>▪ Lack of familiarity and expertise of pediatric team with adult issues that arise as survivor enters adulthood</li> </ul>
<p><b>CANCER CENTER: Shared Care</b></p> <p>Care provided within a specialized cancer center program (e.g., Neuro-oncology; Leukemia/Lymphoma); LTFU clinician directs LTFU aspects of care</p>	<ul style="list-style-type: none"> <li>▪ Patient benefits from combined expertise of primary treatment team and late effects specialist</li> <li>▪ Structure promotes opportunities for research and training of healthcare professionals</li> <li>▪ Continued connection with treatment team and clinic setting provides "comfort zone" for survivor</li> <li>▪ Allows for continuity of care and ease of communications between oncologist and LTFU clinician</li> <li>▪ Provides smooth transition</li> </ul>	<ul style="list-style-type: none"> <li>▪ May discourage use of primary care provider (PCP)</li> <li>▪ Requires substantial hospital resources and dedicated clinicians as survivor population grows</li> <li>▪ Protects patient from having to negotiate their own healthcare</li> </ul>
<p><b>YOUNG ADULT TRANSITION: Formalized Transition Program</b></p> <p>Follow-up in a specialized clinic staffed by adult oncologist/nurse practitioner or family practice physicians/nurse practitioners with expertise in late effects of therapy; often in a partnership between treating pediatric institution and adult-focused academic setting</p>	<ul style="list-style-type: none"> <li>▪ Pediatric providers facilitate smooth transition to adult program</li> <li>▪ Collaborative approach to care</li> <li>▪ Established relationship with pediatric provider makes transition more comfortable for survivor</li> <li>▪ Multidisciplinary approach with access to adult-focused specialists as needed</li> <li>▪ Rich environment for ongoing research with young adults survivors as they age; ability to access ongoing studies at treating institution</li> </ul>	<ul style="list-style-type: none"> <li>▪ Not designed to provide primary care services</li> <li>▪ May not always be geographically convenient for survivors as they age and become more independent/transient</li> </ul>

Table I: Models of Care (continued)

MODEL	ADVANTAGES	DISADVANTAGES
<p><b>YOUNG ADULT TRANSITION: Adult Oncology-Directed Care</b> Adult oncologist in the cancer center or community provides LTFU care</p>	<ul style="list-style-type: none"> <li>▪ Specialized oncology-focused care</li> <li>▪ May be more convenient for patient (if in local community)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Provider attention may be distracted by acuity of on-therapy patients</li> <li>▪ Illness (not wellness) focus</li> <li>▪ Potential lack of provider interest in or knowledge of late effects</li> <li>▪ Relapse-focused follow-up rather than risk-adapted screening and health promotion focus</li> <li>▪ Research may be difficult to coordinate</li> </ul>
<p><b>COMMUNITY-BASED CARE:</b> The pediatrician, family practice physician, advanced practice nurse, or internist within the community handles LTFU</p>	<ul style="list-style-type: none"> <li>▪ Promotes independence and reintegrates survivor into primary care</li> <li>▪ Wellness focus</li> <li>▪ Convenience for survivor</li> </ul>	<ul style="list-style-type: none"> <li>▪ Limited provider knowledge and training regarding late effects and risk-based screening (particularly relevant for survivors with more significant exposures)</li> <li>▪ Provider may lack time to devote to complex physical and psychosocial needs of survivors</li> <li>▪ Lack of sub-specialist resources with survivorship expertise</li> <li>▪ Requires survivor to know risks and advocate for their own needs</li> <li>▪ Difficult to coordinate research</li> <li>▪ Difficult to update survivors regarding new information as it becomes available</li> </ul>
<p><b>COMBINED APPROACH: (Consultative Model)</b> Initial follow-up in cancer center-based program with transition to community-based PCP; ongoing interaction with cancer center as needed or at request of PCP</p>	<ul style="list-style-type: none"> <li>▪ Allows for partnership between oncologist and primary care provider</li> <li>▪ Cancer center is always available as a resource</li> <li>▪ Access to cancer center network of specialists</li> <li>▪ Enhances local provider knowledge of late effects</li> <li>▪ Encourages PCP utilization of published screening guidelines for survivors</li> </ul>	<ul style="list-style-type: none"> <li>▪ PCP not an expert on childhood cancer late effects or issues</li> <li>▪ Difficult to keep PCPs up-to-date on new information as it becomes available</li> <li>▪ Initial transition may be difficult for survivor</li> <li>▪ May not be well-suited for survivors with more complex follow-up requirements</li> <li>▪ Potential loss of patient for research initiatives</li> </ul>
<p><b>NEED-BASED CARE:</b> Type and intensity (“level”) of follow-up care determined by intensity of cancer treatment that survivor received</p>	<ul style="list-style-type: none"> <li>▪ Allows for more equitable distribution of healthcare resources (survivors with greatest need receive most intensive follow-up care)</li> <li>▪ May be more convenient for lower-risk survivors (follow-up for most survivors is by mail, phone, or with PCP in local community)</li> <li>▪ Encourages involvement of primary care providers in long-term follow-up</li> <li>▪ Promotes continued contact with patients, potentially enhancing research efforts</li> </ul>	<ul style="list-style-type: none"> <li>▪ PCP not an expert on childhood cancer late effects or issues</li> <li>▪ Difficult to keep PCPs up-to-date on new information as it becomes available</li> <li>▪ Survivors triaged to lower levels of care do not receive care from late effects expertise</li> </ul>

Based on data from references <sup>12, 13, and 14</sup>

## TRANSITION ISSUES

To optimize the health and quality of life of childhood cancer survivors, it is important to develop a systematic plan of care that continues beyond the childhood years. To achieve ongoing care, two phases of transition are key (see Table 2).

### Phase I: Transition to LTFU

Following completion of cancer treatment, patients enter an initial phase of follow-up care, which focuses on surveillance for disease recurrence. Following completion of this initial phase of follow-up, patients should transition from disease-focused care to survivorship-focused care, where the emphasis is now placed on risk-based screening and health promotion.

When and where the transition to survivorship-focused care takes place, which patients are followed, and what services are offered in the LTFU program varies from one institution to the next. There is no one ideal model. Factors that may affect the planning for and implementation of survivorship care programs include institutional commitment, finances, and resources.<sup>15</sup> In general, most centers provide follow-up care to all survivors, but some may also have specialized programs for specific patient groups, such as brain tumor survivors. Common services provided include physical exams, risk-based late effects screening, education and counseling regarding late effects and health promotion, and referrals to specialists and community resources. The setting in which LTFU care takes place may also vary, but common settings include children's hospitals, cancer centers, or academic medical centers.

### Phase II: Transition to Adult Healthcare

An additional transition occurs when the survivor moves from pediatric LTFU care to adult-oriented healthcare. This transition phase is a necessary component of most (but not all) LTFU programs. Whether or not this phase of transition needs to occur depends largely on the type and scope of the facility providing follow-up care. Transition to adult healthcare occurs at a developmentally important time, as the survivor moves from a pediatric setting where responsibility for care lies with the parent, to an adult setting in which the survivor assumes primary responsibility for their own care. This type of transition can be particularly challenging, because it generally requires locating, educating and communicating with appropriate healthcare providers in an adult-focused facility or in the community, and some of these providers may have little knowledge or expertise in the care of childhood cancer survivors. Ideally, this phase of transition should incorporate some overlap between the pediatric and adult provider in order to allow for a smooth transition of care, and to allow for the parent and young adult to become comfortable with the new healthcare provider. Addressing the transition process well in advance of its occurrence is essential in order to equip the survivor and family with knowledge and skills that will allow them to advocate for their own healthcare by the time of this transition. Additional information regarding the transition to adult healthcare is included in Sections 2 and 5.

**Table 2: Key Aspects of Transitions in Survivorship Care**

TRANSITION FROM ACUTE CARE TO LTFU	TRANSITION FROM PEDIATRIC TO ADULT CARE
<ul style="list-style-type: none"> <li>▪ Transition time points may vary between institutions</li> <li>▪ Emphasis on risk-based screening and health promotion</li> <li>▪ May cause mixed emotions (e.g., excitement versus anxiety) about leaving trusted staff who were involved in treatment and visiting the clinic less frequently</li> </ul>	<ul style="list-style-type: none"> <li>▪ Occurs as adolescents and young adults "age out" of pediatric healthcare system</li> <li>▪ Preparation of survivor and family assists in successful transition</li> <li>▪ May cause mixed emotions while transitioning from familiar to unfamiliar setting</li> </ul>

## CHALLENGES/BARRIERS TO DELIVERING SURVIVORSHIP CARE

There are numerous barriers that can make survivorship care a challenge, including knowledge deficits among survivors<sup>9</sup> and healthcare professionals<sup>16</sup>, psychosocial issues<sup>17</sup>, and the complexities of the healthcare system<sup>18, 19</sup>. Common barriers are highlighted below:

### Knowledge Deficits - Survivors

- Many asymptomatic survivors do not realize the importance of ongoing cancer-related follow-up care
- Survivors who are unaware of actual or potential late effects are unlikely to seek appropriate cancer-related healthcare or advocate for their personal healthcare needs

### Interventions for Knowledge Deficits

- Communicate a plan for follow-up care to the patient/family early (while the patient is still receiving therapy)
- Inform survivors regarding their cancer diagnosis, treatment history, and risk of developing late effects
- Present information at an age- or developmentally-appropriate level
- Provide ongoing education as the survivor matures and assumes more independence
- Keep survivors up-to-date regarding available resources, such as the *COG Long-Term Follow-Up Guidelines*, *COG Health Links*, and *Childhood Cancer Survivors: A Practical Guide to Your Future* (N. Keene, W. Hobbie & K. Ruccione Eds, O'Reilly Media, 2007)

### Knowledge Deficits - Professionals

- Primary care providers (PCPs) may be unfamiliar with the ongoing healthcare needs of childhood cancer survivors, including cancer-related health risks, screening guidelines, and risk-reduction methods

- PCPs may lack experience and expertise in managing childhood cancer survivors with complex healthcare needs
- There may be limited local resources to assist the PCP in providing follow-up care for childhood cancer survivors
- There may be deficits in communication between pediatric cancer centers and primary healthcare providers regarding follow-up care and late effects issues.

### Interventions for Knowledge Deficits

- Develop regional educational programs for healthcare professionals to increase awareness of survivorship issues
- Advocate for development of survivorship programs
- Provide funding incentives to assist with establishment of specialty programs
- Establish programs to train healthcare professionals and promote expertise in survivorship care
- Use technology (e.g., the Internet) to distribute survivorship resources and information to healthcare professionals in readily-accessible and user-friendly formats

### Psychological Factors Affecting Care

- Fear or anxiety of another cancer diagnosis, or of being diagnosed with a serious late effect of cancer treatment
- Desire to leave cancer diagnosis in the past
- Avoidance of follow-up care due to unresolved feelings related to cancer diagnosis and treatment during childhood

### Interventions for Psychological Factors

- Introduce the concept of long-term follow-up to the patient/family before treatment is completed
- Allow sufficient time for the survivor to become familiar with the process of

LTFU and to anticipate planned transitions in care

- Encourage survivors to be proactive in their healthcare and to adopt healthy lifestyle behaviors in order to minimize additional risk factors

#### Healthcare System Issues

- Lack of standardization in delivering cancer-related healthcare to childhood cancer survivors
- Pediatric health systems are often family-oriented, while adult healthcare is directed at the individual and requires independence and self-advocacy skills in order to attain required care successfully
- Survivors may have limited knowledge or experience in navigating the complex healthcare delivery system
- Some survivors may lack the cognitive ability and skills to deal with the complexities of the adult healthcare system
- Distance to a specialized follow-up center may be prohibitive
- The transition from childhood to young adulthood accentuates common barriers to healthcare (e.g., lack of knowledge, financial issues, etc.), making compliance with ongoing cancer-related healthcare particularly challenging.

#### Interventions for Healthcare System

- Explore the feasibility of satellite clinics to service remote areas
- Develop outreach programs to assist community providers in providing care
- Initiate the transition process early
- Provide patients/families with education regarding the transition process

#### Financial/Insurance Issues

- Survivors with multiple or complex late effects may be unemployed, and thus unable to obtain insurance coverage
- Young adults are more geographically mobile with respect to school and

employment, which may result in difficulty obtaining health insurance

- A diagnosis of childhood cancer may be considered a pre-existing condition, thus it may be difficult for a survivor to acquire health insurance
- Survivors may “age-out” of private or public insurance coverage
- Survivors who have insurance may face restriction of coverage with regard to providers and/or screening tests
- Outright cost of healthcare is often prohibitive for uninsured survivors

#### Interventions for Financial/Insurance

- Provide survivors with information regarding government programs for adults with special needs and/or disabled adults
- Develop a directory of community resources and referrals for survivors
- Provide survivors with access to personnel with expertise in financial and insurance issues

#### Overcoming Barriers/Challenges in LTFU

Late effects programs are in a unique position to minimize some of the barriers for childhood cancer survivors in obtaining appropriate healthcare, both by providing this healthcare and serving as a resource for survivors and the healthcare community. Education of the survivor and the healthcare community about the importance of LTFU care is also a critical responsibility of late effects programs. In addition to providing essential education, late effects programs can provide information about community resources and assist survivors in overcoming barriers related to financial/insurance issues and psychological factors, and they can promote self-care and independence in the young adult population. Ideally, childhood cancer survivors and their families will receive education regarding the need for long-term follow-up care throughout the continuum of care. Once survivors

formally enter into a LTFU program, education is an integral component of the process. Gradually, the educational focus regarding potential late effects and the importance of continued follow-up should transition from the parent to the maturing child, in preparation for the survivor's entry

into the adult healthcare system. As young adults, survivors should see themselves as their own advocates in obtaining necessary services in order to continue their LTFU care. Barriers to risk-based healthcare and methods to help facilitate the transition process are summarized in Table 3.

**Table 3: Barriers to Risk-Based Healthcare in Childhood Cancer Survivors**

<b>FIRST TRANSITION PERIOD: FROM ACUTE CANCER CARE TO LONG-TERM FOLLOW-UP (LTFU) PROGRAM</b>	<b>SECOND TRANSITION PERIOD: FROM LTFU PROGRAM TO YOUNG ADULT CARE</b>
<p><b>BARRIERS:</b></p> <ul style="list-style-type: none"> <li>▪ Lack of adequate number of LTFU programs</li> <li>▪ Fear of continued care</li> <li>▪ Financial or distance constraints</li> <li>▪ Lack of understanding of the need for continued surveillance</li> </ul>	<p><b>BARRIERS:</b></p> <ul style="list-style-type: none"> <li>▪ <b>Survivor-specific barriers:</b> <ul style="list-style-type: none"> <li>– Lack of understanding or knowledge of risks</li> <li>– Fear of transitioning</li> </ul> </li> <li>▪ <b>Healthcare professional-specific barriers:</b> <ul style="list-style-type: none"> <li>– Few programs for young adult survivors</li> <li>– Community healthcare physicians unfamiliar with the risks and problems of the population</li> <li>– Lack of communication between cancer center and community physicians</li> </ul> </li> <li>▪ <b>Medical system-specific barriers:</b> <ul style="list-style-type: none"> <li>– Difficulty finding affordable insurance, especially for survivors in rural settings or self-employed survivors</li> <li>– Limitations on medical insurance coverage of some screening tests in young adults</li> <li>– Restrictions of managed care organizations</li> </ul> </li> </ul>
<p><b>METHODS TO FACILITATE TRANSITION:</b></p> <ul style="list-style-type: none"> <li>▪ Clearly explain the purpose of risk-based care</li> <li>▪ Discuss long-term plans for follow-up through the survivor continuum</li> <li>▪ Address emotional issues of survivorship</li> <li>▪ Provide a summary of the cancer diagnosis and treatment</li> <li>▪ Educate regarding risks and methods to reduce risk</li> <li>▪ Foster self-care practices</li> <li>▪ Promote positive decision-making skills for healthy lifestyles</li> </ul>	<p><b>METHODS TO FACILITATE TRANSITION:</b></p> <ul style="list-style-type: none"> <li>▪ <b>Survivor in a LTFU program:</b> <ul style="list-style-type: none"> <li>– Develop a policy for the process of transition</li> <li>– Identify qualified and committed healthcare providers</li> <li>– Involve the survivor and the family in the process</li> <li>– Assess the expectations and healthcare beliefs of the survivor and the family</li> <li>– Emphasize the goals of risk-based healthcare</li> <li>– Highlight the importance of the survivor/family as the key providers of healthcare information</li> <li>– Focus on the survivor as self-advocate</li> <li>– Stress the ongoing communication between the LTFU team and new providers</li> <li>– Discuss the transfer of medical records and the oncology medical summary</li> </ul> </li> <li>▪ <b>Survivors in general (and not in a LTFU program):</b> <ul style="list-style-type: none"> <li>– LTFU community as activists for survivorship</li> <li>– Raise public awareness</li> <li>– Educate insurance companies and managed care organizations</li> <li>– Communicate with state and federal legislators</li> </ul> </li> </ul>

From: Oeffinger KC and Eshelman DA "Transition Issues" in Schwartz CL, Hobbie WL, Constine LS, Ruccione KS (eds.), *Survivors of Childhood and Adolescent Cancer: A Multidisciplinary Approach*, Heidelberg: Springer, 2005. Used with kind permission of Springer Science and Business Media.

## SECTION 2: PROGRAM DEVELOPMENT

EDITOR:

**Aimee Sznewajs, RN, MS, PNP**

*Survivors of Childhood Cancer Program Coordinator  
UCSF Children's Hospital, San Francisco, California*



## INITIAL CONSIDERATIONS

**T**here are multiple factors to consider when developing or evaluating a LTFU program for survivors of childhood cancer. These include (1) determining program goals, (2) assessing institutional needs, (3) assessing patient needs, and (4) patient identification and recruitment.

### Determining Program Goals

Planning for a LTFU program begins with a clear delineation of goals. These may vary based on institutional, community and patient needs, and may include:

- Clinical care
- Psychosocial support
- Education (e.g., patient/family, healthcare professional)
- Research

### Assessing Institutional Needs

The specific needs and resources of an institution are closely linked with program goals. Consider how the LTFU program will help fulfill your institutional needs:

- Will a LTFU program strengthen and/or extend the range of services already offered?
- Will the LTFU program serve to extend your institution's referral base?

- Will the program exist to provide clinical care, or will there be another concurrent goal or emphasis (e.g., research, education)?
- Is there a plan to incorporate an educational component into the program, such as seminars for healthcare providers or workshops for patients and families?
- Will subspecialty care be available (in the clinic, on a referral basis)?
- Will this program fill an unmet need in the communities that your institution serves?

### Assessing Resources

- What resources are available to establish and maintain the program?
  - What personnel are available to support LTFU patients?
  - What clinic space is available for use? When is it available?
  - What are the possible funding sources?
- Does your institution have the resources (e.g., administrative personnel, space, money, devoted staff) to support a formal clinic or are your patients better served in a community network?

*“To facilitate the transition from pediatric oncology to community providers, our clinic has focused its efforts on educational interventions to empower the survivor with the resources to advocate for appropriate community health care. The broad mission of the ACT Clinic is to improve the quality of life of the long-term childhood cancer survivor . . . .*

*Patients who are in remission 5 years after diagnosis and at least 2 years following completion of antineoplastic therapy are eligible for transfer to the ACT Clinic. . . . Survivors are evaluated annually by the clinic staff until they are 10 years' post-diagnosis. . . or at least 18 years of age, whichever comes last. After alumni survivors are discharged to the care of community physicians, the St. Jude Cancer Registry continues to perform annual follow-up for the lifetime of the patient.”*

*- Hudson et al. 2004<sup>20</sup>*

### Identifying, Recruiting & Retaining Patients

Establishing a plan for patient identification and recruitment is an integral part of the program development process. Consider the following issues:

- What are the eligibility criteria?
- What are the referral source(s)?
- How will eligible patients be identified and approached?
- Will services be limited to patients treated at your institution – or will patients from outside institutions be eligible to participate?
- What process will be used for patient recruitment?
- Is there a clinical database in place to maintain the following information:
  - Current address and phone number
  - Updated insurance information
  - Contact information for next-of-kin

- How will patients be tracked and notified of return appointments in a timely manner?

### Assessing Patient Needs

In addition to the needs and resources of each institution, one should consider the needs of the patients and families participating in a LTFU program.

- Where will services be provided?
- Who will be providing the services?
- Will providers be familiar with the needs of this patient population?
- What types of payment will be accepted?
- Will there be opportunities for patients to participate in clinical research?
- What role will the survivors themselves have in planning for and evaluating LTFU services?

*“Our clinic realized that many of our patients lived over an hour away and could not easily travel (which included taking time off of work and/or school) for an appointment now that their cancer was in remission. We recognized that they still needed specialized follow-up care after treatment for cancer. So, we decided to bring the clinic to them. Once per month we hold an out-reach clinic for survivors. We come to them (MD, the PNP or RN, and the social worker) and ensure that they obtain the services they need.”*

*- Genevieve Sylvain, RN, Coordinator LTFU Program  
The Children’s Hospital, Denver, CO*

## DETERMINING PROGRAM PARAMETERS

Once you have considered the initial issues in program development, it is important to determine specific parameters for your LTFU program. To do so, weigh the options listed below:

### Initiation of Long-Term Follow-Up Care

- Decide when transition to the LTFU program will occur. Possibilities include:
  - At a set time interval (e.g., one or two years) following completion of active treatment
  - At a set time interval (e.g., five years) following diagnosis
  - Differing criteria based on diagnosis or mode of treatment (e.g., transplant patients may enter the program at different times than patients treated with conventional therapy; children who have survived a brain tumor may not be ready for LTFU until they have been off therapy longer than other patients)
- Most criteria require that the patient be in remission and fully recovered from the acute effects of therapy

### Transition from Acute Care to LTFU

Transition from acute care to LTFU is a process rather than an event. In advance, the LTFU team and other staff within the department should discuss how and when transition to LTFU will occur (see also: Section 1). The following are suggestions to ease the transition process.

- **Plan ahead:** Planning for entry into the LTFU program should be taken into consideration before the patient is formally ready to enter the program. The concept should be introduced early on so that LTFU becomes a logical continuation of care.

- **Inform the patient and family** regarding how the LTFU program differs from regular oncology follow-up (e.g., emphasis on health education and monitoring for late effects of cancer therapy)
- **Identify barriers** to transition, such as:
  - Primary oncologist not wanting to give up care
  - Patient/parents not wanting to transition
  - Scheduled clinic time inconvenient for family
  - Financial/insurance status (e.g., may be unable to pay for follow-up visits and/or tests not covered by insurance)
- **Have a familiar staff member in clinic**, if possible, during the patient's first visit, if the LTFU staff is not known to patient/family

### Age Range/Age Limits

Determine the upper and lower age limits for the LTFU program. Considerations include:

- Is the upper age limit determined by an institutional policy? (e.g., patients older than 18 or 21 years of age may not be accepted at some pediatric institutions)
- If there is no upper age limit at your institution, a decision must be made regarding whether the LTFU program will continue to see patients throughout the lifespan, or whether patients will be transitioned at some point to the adult medical care system
- Some insurance companies may not approve charges for an adult to be seen in the pediatric setting despite the fact that the patient is a childhood cancer survivor
- Patient eligibility for LTFU research protocols (see Section 4)

*"We recently saw a 60 year old woman who was treated in the 1950's for Wilms tumor. She found us on our website and said she wanted us to see that children did survive back then. There was no chemo, but she had radiation. She has tremendous scoliosis. She said, 'I survived . . . now you can learn and I can learn.'"*

*- Brian Greffe, MD, H.O.P.E. Clinic Director  
The Children's Hospital, Denver, CO*

### General versus Specialized LTFU

Consider what type of general and/or specialty services will be provided by your LTFU program:

- Will the LTFU program best serve your survivor population with a general clinic for all survivors?
- Is there a need for specialized LTFU programs for specific populations?

*For example, all brain tumor survivors may attend a separate LTFU clinic that is staffed by a neuro-oncologist, neurologist, endocrinologist, pediatric neuro-oncology nurse, and social worker. Likewise, many bone marrow transplant programs provide specialized follow-up care that can track immune reconstitution, monitor chronic graft-versus-host disease, and provide neurocognitive testing.*

- Are there resources to support both a general and specialized clinics?
- Will your research or educational programs have a specialized focus?
- How will you recruit and structure clinics requiring specialists from other fields?

### Determining Frequency of Clinic Visits

The number of survivors who need to be seen, the frequency of their follow-up visits, the clinical resources available to provide service to patients, and the number of survivors that can be physically accommodated in a single clinic session will ultimately determine how frequently to schedule LTFU clinics.

- **Staffing:** Is there a physician and/or nurse practitioner who will be allocated solely to the LTFU program? If not, what is the availability of clinicians to see these patients? How often are they available?
- **General versus specialized long-term follow-up:** Will the program include a specialized clinic such as Neuro-Oncology or BMT? These specialty clinics are sometimes scheduled less frequently than general LTFU clinics, depending on how many patients need to be seen.
- **Exam room availability:** Where will the patients be seen? Do you have the space to see these patients within your oncology outpatient area? Are there alternate or off-site locations where the clinic may be held?
- **Follow-up:** Who will follow-up on the results of screening evaluations for each patient (e.g., yearly ECHOs, CBCs, etc.)? Is there an existing system with personnel to track and report these results? If results are abnormal, what will the process be to provide intervention and/or referral?
- **Risk-Based Stratification for Long-Term Follow-Up Care:** Some cancer survivors may need more frequent, intensive and detailed assessment and follow-up than others.<sup>21</sup> For example, those with stage I or II Wilms tumor or germ cell tumor requiring surgery alone may need only limited follow-up. On the other hand, ongoing intensive follow-up would be mandatory for a transplant

survivor, a patient with a stage IV tumor, or a patient who received radiation or “megatherapy.”

### Transition to Adult Healthcare System

Determine if/when transition from your LTFU program will occur. Possibilities include:

- When the patient reaches an age when he/she is no longer eligible to be seen at the pediatric institution

- When the patient has been seen a certain number of years in the LTFU clinic and is ready to transition to community-based care
- No transition (the patient continues to be seen in the LTFU clinic for life)

## Resources for Assisting Patients with Healthcare Transitions

### **Patient Guides:**

*Closing the Umbrella: When Your Child's Treatment Ends*, American Cancer Society: [www.cancer.org](http://www.cancer.org)

*Facing Forward: Life After Cancer Treatment*, National Cancer Institute: [www.cancer.gov](http://www.cancer.gov)

Duffey-Lind E., Diller L, O'Halleran E. *Transition to Survivorship – What Parents Should Know*. Dana-Farber Cancer Institute, 2006 (available for purchase)

*The Mountain You Have Climbed*. National Children's Cancer Society. [www.nationalchildrenscancersociety.org](http://www.nationalchildrenscancersociety.org) (click on “Publications”)

### **Websites:**

The Healthcare Transition Initiative at the University of Florida: <http://hctransitions.ichp.ufl.edu>

University of Illinois at Chicago Transition Information and Resources: <http://internet.dscc.uic.edu/dsccroot/parents/transition.asp>

Maternal and Child Health Library: [http://www.mchlibrary.info/KnowledgePaths/kp\\_CSHCN.html#transition](http://www.mchlibrary.info/KnowledgePaths/kp_CSHCN.html#transition)

## BUILDING A MULTIDISCIPLINARY TEAM

**S**urvivors have unique needs that are frequently medical, educational and psychosocial in nature. To promote the coordination and teamwork to ensure that these needs are met, and to promote health and prevent future illness, many LTFU programs have established multidisciplinary teams consisting of professionals from nursing, medicine, education, social work, psychology, and related fields. The core team often includes a nurse coordinator, pediatric oncologist, social worker, psychologist, and school liaison.

The keys to the formation and operation of a successful multidisciplinary team include:

- Committed members who have the support of their department/supervisor
- An initial meeting during which each member's role and previous experience in pediatric oncology are respectfully discussed
- A mission statement that clearly sets forth the purpose of the team, the scope of its activities, and its guiding principles. (This may be the LTFU program's mission statement with which all team members are in agreement.)
- Creation of a team protocol that specifies the roles and responsibilities of

team members in all aspects of the program (e.g., clinical care, education, and/or research)

- Periodic internal program analysis and outside evaluation of how the team is functioning, so that it continues to achieve the purposes for which it was established

### Building Specialty Teams

Surrounding the core survivorship team are a group of physicians and specialists familiar with evaluating problems in childhood cancer survivors. Such specialties typically include radiation oncology, cardiology, pulmonary, orthopedics, neurology, and endocrinology. A LTFU program may partner with certain specialty practitioners to answer research questions or to provide specialty clinical services, such as "cardiac clinics" for those who received high doses of anthracyclines and/or mantle radiation, or endocrine clinics for those with thyroid problems or growth and development concerns. Regardless of the model of care that is implemented, LTFU programs must be committed to a partnership with healthcare providers across a wide range of specialties to optimally meet the needs of childhood cancer survivors.<sup>14</sup>

### Mission Statement: Example

*"The mission of the Survivors of Childhood Cancer Program is to provide clinical care and education for survivors of childhood cancer and improve outcomes through research and discovery."*

*- Robert Goldsby, MD, Medical Director  
UCSF Survivors of Childhood Cancer Program*

## PROGRAM FUNDING

**A**ll LTFU programs need funding. The resources you have or are able to obtain will directly affect your clinic and the services you have to offer. In this section you will find information about some of the different funding sources available and how to work with them.

Funding is often needed for:

- Salary support, to include personnel to provide:
  - Clinical care
  - Database development
  - Survivor education
- Community outreach
- Assisting uninsured patients

- Staff development
- Program marketing
- Survivorship research

### Sources of Funding

The function and operation of funding sources varies greatly depending on the type of institution (e.g., free-standing children's hospital, private or corporately-owned hospital, large or small institution). Get to know your institution's guidelines for funding sources. Table 4 below provides examples of possible funding sources in various financial sectors.

*"We have been able to help uninsured survivors through an endowment, gifted by an adult cancer survivor who worked in our program. Her legacy was to specifically help uninsured survivors. It is important to build on an endowment that will generate interest and be self-sustaining. This will allow you to help survivors on an ongoing basis."*

*- Brian Greffe, MD, H.O.P.E. Clinic Director  
The Children's Hospital, Denver, CO*

**Table 4: Potential Sources of LTFU Funding**

FUNDING SOURCE	EXAMPLES	URL
<ul style="list-style-type: none"> <li>▪ Federal, State, and Local Government</li> </ul>	<ul style="list-style-type: none"> <li>▪ National Institutes of Health (NIH)</li> <li>▪ National Cancer Institute (NCI)</li> <li>▪ Health Resources and Services Administration (HRSA)</li> </ul>	<a href="http://www.grants.gov">www.grants.gov</a>
<ul style="list-style-type: none"> <li>▪ National, Local and Family Foundations</li> </ul>	<ul style="list-style-type: none"> <li>▪ Lance Armstrong Foundation</li> <li>▪ Hope Street Kids</li> <li>▪ Children's Cancer Fund</li> <li>▪ Leukemia and Lymphoma Society</li> </ul>	<a href="http://www.livestrong.org">www.livestrong.org</a> <a href="http://www.hopestreetkids.org">www.hopestreetkids.org</a> <a href="http://www.childrenscancerfund.org">www.childrenscancerfund.org</a> <a href="http://www.leukemia-lymphoma.org">www.leukemia-lymphoma.org</a>
<ul style="list-style-type: none"> <li>▪ Associations</li> </ul>	<ul style="list-style-type: none"> <li>▪ American Cancer Society</li> <li>▪ American Academy of Pediatrics</li> <li>▪ Candlelighters</li> </ul>	<a href="http://www.cancer.org">www.cancer.org</a> <a href="http://www.aap.org">www.aap.org</a> <a href="http://www.candlelighters.org">www.candlelighters.org</a>
<ul style="list-style-type: none"> <li>▪ Internal Sources</li> </ul>	<ul style="list-style-type: none"> <li>▪ Hospital Foundation</li> <li>▪ Research Institute</li> <li>▪ Philanthropy Department</li> <li>▪ Endowments</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Fundraising</li> </ul>	<ul style="list-style-type: none"> <li>▪ Swim Across America</li> </ul>	<a href="http://www.swimacrossamerica.org">www.swimacrossamerica.org</a>

*“No matter where your funding comes from, LET PEOPLE KNOW WHAT YOU ARE DOING! Develop a long-range plan for your program. Have measurable goals that are compatible with your institution’s mission. Build a relationship with your hospital’s Foundation and Public Relations Department. Initiate a simple meeting or presentation to educate people about your program. The more people know about your program, goals, and potential impact on survivors, the better off you will be.”*

*- Katy Murphy, RN  
Children’s Hospital of Wisconsin*

#### Potential Sources of Funding Assistance

- **Grant writers:** These specialists are sometimes housed within the hospital, research center, or foundation.
- **Hospital foundation staff:** May be able to make connections with potential donors.
- **Departmental staff:** Nursing director, medical director, or administrator – again, make sure your plan is known!
- **Survivors and their families:** They can be the most articulate and convincing voice for a program. A survivor’s story can validate a LTFU program with real life stories and a unique eloquence.

#### What Works?

- **Know your funding source:** What are their areas of interest, average gift size, typical organization funded? Some grants are specific regarding the types of salary support they will support, (e.g., MD/PhD, RN, Social Work, Psychiatry, Child Life Therapy, etc.)
- **Subscribe to listservs:** Join a listserv and receive e-mails regarding grant

opportunities and guidelines; scope can be broad or narrow (See Table 5 for suggestions).

- **Collaborate with community groups:** Partner your medical expertise with the “social” expertise of grass-roots organizations, such as Gilda’s Club. You can apply for the funding, or if better suited, your community partner can apply.
- **Know your budget:** Apply for appropriate grants that match your needs.
- **Apply appropriately:** Be aware of grants with state-specific requirements.
- **Avoid competition:** To avoid competing against your colleagues, make your application process known within your institution.
- **Be specific:** Be aware that there are grant opportunities for minority researchers and research focused on minority populations.
- **State your needs:** Have your program development plan ready. Know what you need – details should be concrete.

*“I speak to groups in the community whenever I can about survivorship. We have someone in the foundation who we work with, and whenever she asks me to speak, I talk about survivorship.”*

*- Brian Greffe, MD, H.O.P.E. Clinic Director  
The Children’s Hospital, Denver, CO*

**Table 5: Listservs**

LISTSERV	URL
The Commonwealth Fund	<a href="http://www.cmwf.org">www.cmwf.org</a>
The Federal Register	<a href="http://www.gpoaccess.gov">www.gpoaccess.gov</a>
Human Resources and Services Administration	<a href="http://www.hrsa.gov">www.hrsa.gov</a>
The Robert Wood Johnson Foundation	<a href="http://www.rwjf.org">www.rwjf.org</a>

**Third Party Payors**

Potential sources of health insurance coverage for patients may include:

- Private insurance through employer
- Private health insurance purchased by the patient or through family coverage
- Government insurance programs such as Medicaid, Medicare, or State Children’s Health Insurance Program (SCHIP)
- Continuation of health coverage (through COBRA coverage - the Consolidated Omnibus Budget Reconciliation Act)

Children and adolescents with cancer are often covered under state Medicaid programs, but coverage under these programs often ends when the patient reaches a certain age (the age varies by state, and is usually between age 18 and 21). Private insurance coverage under parental policies also generally ends when the patient reaches a certain age, depending on the policy. With some policies, coverage may continue while the child is a full-time student, but there is generally an upper age limit, which varies depending on the insurance plan and state of residence. Many young adults lack the insurance benefits traditionally associated with full-time employment, and others are unable to secure full coverage due to their previous

cancer diagnosis. Thus, many adult survivors of childhood cancer may be uninsured or under-insured.

It is imperative to pre-screen patients scheduled to be seen in long-term follow-up to ensure adequate insurance coverage, because it is not uncommon for a patient to have changed insurance carriers, or to have lost insurance coverage altogether. A comprehensive follow-up visit that includes “routine” laboratory and other commonly-ordered studies (such as echocardiograms or pulmonary function tests) may be very expensive. Patients who are uninsured or under-insured may face years of payments for such services. Early efforts to confirm insurance coverage decrease potential problems related to delays or cancellation of services, financial burdens for the patient, and lack of reimbursement for the clinic.

Survivors who are uninsured, underinsured, or who are reluctant to keep LTFU appointments because of insurance concerns can be directed to the Medical Social Work Department or a Patient Financial Representative in the institution’s billing department for assistance. Ultimately, each LTFU program must decide how the billing for uninsured and under-insured patients will be managed, based on their available resources, including institutional, governmental, and philanthropic sources.

## PROGRAM MARKETING

**C**reating an effective marketing strategy starts with a dedicated LTFU team, including a medical director and program coordinator committed to sharing in the marketing responsibilities. In addition, partnerships with your institution's business development division and public relations department are invaluable because of their connections and ability to highlight your LTFU program.

### Marketing Plan

**Define Goals:** The first step in a marketing plan is to define goals clearly. The medical director, program coordinator and other team members need to collaborate and determine the major objectives for the LTFU program. Suggestions regarding potential goals can be obtained through:

- Patient and family interviews
- Patient surveys
- Focus groups
- Suggestion box
- Survey of healthcare team members

**Define Audience:** Consider both internal and external marketing. Internal marketing to other medicine subspecialties within your institution (such as cardiology, endocrine, and psychiatry) - and to multidisciplinary groups (such as child life, social work, physical therapy, and nursing) – can be a powerful mechanism to recruit patients and advertise services. When targeting the external market, be aware of whether you would like your marketing approach to reach only survivors and families and/or others, such as pediatric providers in private practice, external specialty providers, and insurance companies.

**Examine Current Competition:** The next step in the marketing plan is to determine your target market, based on the local environment and knowledge of consumer use trends. Are there other LTFU programs in the area? If so, would your institution and survivors benefit from developing and marketing a specialty survivorship program rather than a general LTFU program?

**Develop Marketing Tools:** Finally, determine a plan for promoting your program in conjunction with the business development office. Potential marketing tools include:

- Brochures or handouts
- Website
- Newsletter
- Annual survivor events
- Educational sessions
- Fundraising events
- Posters
- Publicity via patient/parent support groups
- Internal news releases

In summary, the success of a LTFU program depends not only on the structure of the program and clinic – factors determined by assessing program goals, and institutional and patient needs – the program must also market and communicate the availability of its services in order to maximize utilization and ensure that survivors are able to access the LTFU services that they need.

## SECTION 3: DELIVERING LONG-TERM FOLLOW-UP CARE

EDITOR:

**Marcia Leonard, RN, PNP**

*Coordinator, Long-Term Follow-Up Clinic*

*C. S. Mott Children's Hospital, University of Michigan, Ann Arbor, MI*



## CLINIC OPERATIONS

**W**hile the number of survivors has grown, so has the need for special programs for childhood cancer survivors who experience late effects of treatment. A multidisciplinary team approach is ideal for the long-term follow-up of survivors who often have multiple health and psychosocial needs that require a comprehensive approach. The team works together to evaluate the patient and provide medical management, education, screening, and referrals to appropriate community resources.

### Care Delivery Methods

The LTFU team generally follows the survivor on an annual basis and provides risk-based survivor care, which includes surveillance for late effects and targeted education and counseling focused on health maintenance and promotion. Patients attending the LTFU clinic undergo a complete physical exam and targeted studies to evaluate organ function and monitor for late effects; these studies are individualized based on the survivor's treatment history. A comprehensive LTFU program also provides psychosocial evaluation, guidance, and vocational assistance.

There are a variety of care delivery models that may be utilized in LTFU, all of which can be effective. In some programs, physicians may provide most of the care, including not only the traditional history and physical exam, but also the educational and anticipatory guidance components. In other programs, nurse practitioners provide similar services, and rely on the physician, who serves as the Medical Director, for consultation and guidance as needed.

### Clinic Staff

Requirements for clinic staff will vary with each program, and you may find that as your program grows, you may need to increase or change members of your team.

However, most programs will require at minimum the following staff members:

**Medical Director:** A physician who is responsible for the medical care provided by the program. The medical director may or may not be involved in the everyday operation of the clinic, but should provide oversight and be available for consultation as necessary based on patient needs.

**Clinician:** A healthcare professional who provides direct patient care in the clinic. The clinician may be a physician (who may also serve as the medical director), nurse practitioner (NP), or physician assistant (PA). The clinician obtains the history and performs the physical exam, orders specific screening evaluations and tests, and prescribes recommended follow-up. The clinician works closely with the medical director. Many LTFU programs are nurse-led, with the NP acting as the primary coordinator of the program. Nurse practitioners specializing in childhood cancer survivorship often have prior experience managing pediatric oncology patients during the acute treatment phase and therefore are knowledgeable regarding the entire illness continuum. The NP is capable of evaluation, management and follow-up of patients in a late effects program. In many settings, the NP sees patients autonomously and may also function as educator, researcher, and program manager in addition to serving as the program's clinician. The role of the nurse practitioner specializing in childhood cancer survivorship has been described by Hobbie.<sup>22</sup>

**Nurse Coordinator:** A nurse who is responsible for overall care delivery within the program. The role of the nurse coordinator may vary depending on the program's needs, but often includes responsibility for reviewing medical records, generating treatment summaries and screening recommendations, coordinating referrals after patients are seen by the

clinicians, and providing extensive patient/family education. The nurse coordinator often provides test results to the family and/or patient, and maintains contact with primary care physician. In some programs, the clinician (e.g., nurse practitioner) also functions as the nurse coordinator.

**Social Worker:** The social worker is responsible for providing psychosocial assessment, education, and support to the patient and their family members, and refers patients to resources as needed based on individualized assessment.

**Secretary/Receptionist:** This team member is generally responsible for the clinic organization. Scheduling appointments, registration of patients, organizing charts and a variety of other daily activities are critical to clinic flow.

**Additional Staff:**

As the LTFU program develops and grows, additional staff members, who see patients on an “as needed” basis, may be added, such as:

**Nutritionist:** The nutritionist obtains a diet history, calculates body mass index and discusses nutritional issues.

**Dentist:** The dentist performs a basic oral examination, and provides information, guidance and referrals for care.

**Physical Therapist:** The physical therapist provides assessment of physical performance (or physical function) for patients in the program. The physical therapist may also provide specific physical activity recommendations for patients whose impairments and activity limitations prohibit their participation in usual physical activity and/or exercise.

**Psychologist:** A licensed mental health professional who provides psychological assessment and referral as indicated for patients in the program. The psychologist may perform or schedule standardized tests as dictated by follow-up in protocols.

**Clinical Research Assistant (CRA):** An individual with background and experience in clinical research who is responsible for data collection and coordinates research activities within the program.

**Outreach Educational Coordinator:** Staff member responsible for assisting with school issues; often makes school visits and helps schools implement or develop individualized education programs.

**Neurologist, Neurosurgeon, and Neuro-oncologist:** Specialists who may participate in or provide follow-up care for patients with cancers of the brain or spinal cord.

**Bone Marrow Transplant Physicians:** Specialists who may participate in or provide follow-up care for patients who have undergone a bone marrow (hematopoietic stem cell) transplant.



**Pediatric Nurse Practitioners: Scope of Practice**

Many pediatric oncology NPs are trained and certified as pediatric nurse practitioners (PNPs). Although the scope of practice for PNPs is generally limited to patients within the pediatric age range (birth to 21 years), the National Association of Pediatric Nurses Practitioners (NAPNAP) provides guidance regarding circumstances when the scope of PNP practice may extend beyond the pediatric age range, as follows:

*“There are special situations in which it is appropriate for the PNP or other pediatric healthcare providers to care for an individual older than age 21 years until appropriate transition to adult healthcare is successful. There is a growing population of adolescents and young adults with special healthcare needs, chronic conditions, and disabilities who need transition care from pediatric to adult healthcare settings. These adolescents and young adults face unique challenges in accessing adult healthcare providers who can provide adequate primary and specialized healthcare services.”<sup>23, 24</sup>*

*Pediatric healthcare providers have an extensive knowledge base regarding developmental issues and a unique awareness of the concerns pertaining to adolescent and young adult healthcare provider transitions and are qualified to assist these patients during the transition phase.<sup>25</sup> Establishing exclusive upper age limits to PNPs’ practice may create a significant barrier for PNPs and may limit access to healthcare for this population.*

*In summary, the PNP is highly qualified to provide care to individuals from birth to age 21 years, and in special circumstances beyond age 21 years. NAPNAP firmly supports the scope of practice for PNPs to be inclusive of newborns, infants, children, adolescents, and young adults. **NAPNAP additionally supports the PNP’s role as a provider of healthcare for individuals older than 21 years with unique needs and for young adults during the transition to adult healthcare.**”*

National Association of Pediatric Nurse Practitioners  
Position Statement on Age Parameters for PNP Practice, 2002<sup>26</sup>



### Clinic Space

Ideally, the LTFU clinic should have a designated space away from the active (“on-therapy”) pediatric oncology setting. If space is shared within the pediatric oncology clinic, every attempt should be made to schedule the LTFU clinic during the least busy clinic days and times. It is important to dedicate time, space and personnel to a new LTFU program. If the program is “squeezed in” within the normal clinic day, it is easy to become overwhelmed with the needs of patients currently receiving therapy at the expense of the LTFU patients.

A multi-disciplinary clinic requires more rooms than are typically needed for a traditional clinic setting. Because more than one caregiver will see each patient, each room will be occupied for a significantly longer time than during a traditional clinic visit. Room space can be allocated as follows:

- **By personnel.** Each member of the comprehensive team is assigned a room, and the patients move from room to room.
- **By patients.** The patient remains in one room, and the team members move from room to room.

To make a comprehensive clinic move smoothly, regardless of which room allocation system is used, the team needs to determine how much time each member requires with a typical patient and allocate room/schedules accordingly.

### Schedules

The size of the LTFU program and frequency of clinics will vary depending on the type of care offered, as well as the population served.

- Frequency of clinics varies with program size, funding and needs.
- Many programs begin with monthly clinics and increase the frequency as necessary and as available resources allow.
- Yearly comprehensive visits take considerable time; most programs see 6-10 patients per scheduled clinic day.
- Many programs are set up to have the patient evaluated by all members of the multi-disciplinary team at the initial visit; therefore, additional time should be allotted to accommodate these multiple encounters.
- Subsequent visits generally require less time, because the patient may not need to be seen by all multidisciplinary members.
- Scheduling additional clinics during summer, spring and winter breaks will allow students to attend without missing school.
- Some centers follow specific populations with unique needs (e.g., brain tumor, bone tumor, or bone marrow transplant recipients) in dedicated clinics. Allotment of rooms and schedules will need to be tailored to the specific needs of these specialized teams.
- Some centers schedule patients with similar needs for visits on the same day, thereby utilizing multi-disciplinary staff most efficiently. For example, a clinic dedicated to bone tumor patients may have a physical therapist, orthotist/prosthetist, and orthopedist present. Another way to group patients is by treatment modality; for example, a radiation therapist may be on hand for clinics attended by patients who were treated with radiation.

*Every patient in our long-term follow-up clinic is seen by the Nurse Practitioner, Social Worker, Nutritionist and Physician. To allow a smooth schedule, we have learned that we allow a 2-hour time slot for each patient, and schedule four patients per each time slot. We use four rooms and each of the team members rotates through all four patients, spending about 20 to 25 minutes with each patient. We can then chart/dictate/discuss all four patients before the second group arrives.*

*- Marcia Leonard, RN, PNP  
Coordinator, LTFU Clinic, University of Michigan*

### Clinical Databases

Establishing a clinical database is critical for tracking patients and providing continuity of care. Each new patient seen in the LTFU clinic should be added to the clinical database. Some centers may have access to a web-based, hospital-wide database. If you are developing your own database, computer software programs, such as Excel® or Access® are generally straightforward and easy to use. Institutional CRAs or others with expertise in clinical research or data management may be able to provide guidance regarding development of a clinical database for the LTFU program. Other centers may continue to utilize an index card file system successfully. As patient numbers increase, some method of tracking appointments and follow-up should be in place.

### Forms and Supplies

Most programs develop and stock specialized LTFU forms and supplies to facilitate patient visits and to capture and manage the large amount of data collected during comprehensive annual visits. The following forms and supplies are suggested. Sample forms are available in Appendix 3.

### FORMS

- **Initial visit form** - to include patient demographics, relevant medical and social history, and comprehensive data capture
- **Subsequent visit form** - to include interval history and brief data update
- **Caregiver report form** (if applicable)
- **Growth chart** (should be updated regularly until full growth is achieved)
- **Patient education tracking form**

### SUPPLIES

#### Staff Resources:

- Copies of COG *Long-Term Follow-Up Guidelines* (or computer and printer to allow access to use as needed)
- Lists of local/state subspecialists and referral guidelines
- Dental eruption chart
- Tanner staging chart
- Immunization guidelines
- Reference books (see Section 1)

#### Patient Education Materials:

- Treatment summary/recommendations for follow-up
- Copies of the COG Health Links (or computer and printer to access as needed)
- Breast self-exam teaching model and video
- Sun safety and skin cancer teaching materials
- Tobacco education/cessation program teaching materials
- Nutrition/calcium/exercise handouts
- Information about sexuality/safer sex practices
- Information about camps, support groups, and scholarships for childhood cancer survivors
- A handout regarding how to order: *Childhood Cancer Survivors: A Practical Guide to Your Future (2<sup>nd</sup> Edition)* by Nancy Keene, Wendy Hobbie and Kathy Ruccione, Sebastopol, CA: O'Reilly Media, Inc., 2007. This book is currently available free of charge to “needy” patients at the following web address: [www.candlelighters.org/Book\\_Order\\_Form.pdf](http://www.candlelighters.org/Book_Order_Form.pdf)

## PREPARING FOR THE CLINIC VISIT

**P**reparation for the clinic visit should begin well before the scheduled date. Essential elements include reviewing and extracting data from the medical record and preparation of a comprehensive treatment summary. Exposure-based screening recommendations and a comprehensive medical summary are compiled and shared with the multidisciplinary team.

### Medical Record Review

Ideally, a comprehensive treatment summary should be prepared as patients complete the acute phase of their treatment. Unfortunately, in most institutions, this is not usually done. Therefore, a comprehensive treatment summary must be compiled prior to the initial visit in the LTFU clinic. A thorough review of the medical record is the first step. Arrangements should be made with your institution's medical records department to ensure regular delivery of archived medical records well in advance of the scheduled visit. The chart review can be done by a nurse, clinical research associate, or clinician. The purpose of the review is to summarize the pertinent information regarding the cancer history and treatment, generate a comprehensive summary, and determine appropriate recommendations for risk-based care, screening, and education. See box on Page 46 for details regarding preparation of treatment summaries and Appendix 1 for treatment summary templates.

### Medical Record Issues

One of the most challenging record reviews will be for the patient who was not treated at your center. In order to provide a clinical summary, you will have to try to obtain medical records from the previous center of treatment. A signed "release of information" form will need to be obtained from the patient authorizing release of medical records. It is helpful to specifically request treatment roadmaps or treatment summaries.

This can be a time-consuming process, so requests for information from other centers should be made well in advance of the scheduled LTFU visit. A good initial contact person for assistance in obtaining this information is often the CRA at the treating institution. His/her name can be obtained from the COG website. It may be possible to send/fax the release of information directly to the CRA, and receive the treatment roadmaps or summary sheets directly.

### Screening Recommendations

Based on the treatment summary, the COG *Long-Term Follow-Up Guidelines* should be used to determine the need for specific laboratory work, radiologic evaluations, cardiac studies, etc. Timing of these studies should be determined (e.g., whether they will be scheduled on the same day as the LTFU visit; and if on the same day, before or after the clinic appointment).

*"When we first started our clinic, we "pre-ordered" laboratory studies, based on treatment exposures and had the patient visit the blood drawing station before their appointment. Not infrequently, issues arose following the history and physical that prompted the clinicians to request additional blood studies. Many of our patients weren't happy about going back for a second blood draw. We changed our practice and now schedule blood work at the conclusion of the visit to eliminate this problem."*

*- Marcia Leonard, RN, PNP  
Coordinator, LTFU Clinic, University of Michigan*

Numerous studies on the same day make for a very long time at the clinic, which may be exhausting for some families. Other patients, especially those who live a considerable distance from the center, may prefer scheduling everything at one time.

Good health habits and regular check-ups can keep a survivor healthy and reduce the risk of developing late effects. Many adult cancers are caused by detrimental lifestyle factors. Good nutrition, regular exercise, sunscreen use, avoidance of tobacco products or exposure to second hand smoke, moderate use of alcohol, and maintaining a healthy weight can contribute to healthy survival. Using proper safety equipment such as bicycle and motorcycle helmets, seat belts and safety goggles can protect a survivor from injury. Never driving while under the influence of alcohol or drugs can save lives.

- Every survivor should be counseled regarding the risks associated with tobacco use, illegal drugs (e.g., “party drugs”), and other high-risk activities. Referrals to appropriate substance abuse clinics, counselors or tobacco cessation programs should be provided as needed.
- Every survivor should be counseled regarding safe sex practices and the use of preventive measures to prevent unplanned pregnancies and sexually transmitted diseases

- Female survivors at increased risk for breast cancer should be taught breast self-exams and the current recommendation for mammograms and clinical breast exams. Contact your local American Cancer Society for free brochures that you can distribute during the visit.
- Every survivor should be counseled about sun protection strategies, and those at high risk should be taught skin self-exam and counseled regarding the importance of regular clinical exams

### Team Meetings

Once the initial information has been gathered and the clinical summary is prepared, this information should be shared with members of the multi-disciplinary team. Dissemination of information may occur during a pre-clinic team meeting, in written summary form or via a computerized medical summary. In many clinics, the nurse practitioner determines which team members will need to evaluate an individual patient prior to the visit.

In some clinics, the multidisciplinary team meets to review new patients prior to their first visit to the LTFU clinic. The survivor’s history is presented and existing and potential late effects are reviewed. From this meeting, the plan is set for the clinic visit, the necessary tests are ordered, and referrals are written.



### PREPARING THE TREATMENT SUMMARY

Include the following information in the Treatment Summary. Once completed, the treatment summary should be incorporated into the survivor's medical record. (See *Appendix 1 for Treatment Summary Templates*).

- **General background information**, including:
  - Demographics (e.g., name, sex, date of birth, contact information, insurance)
  - Pertinent medical history prior to the cancer diagnosis (e.g., Down syndrome, congenital heart defects, prematurity)
  - Diagnostic details (e.g., diagnosis, date of diagnosis, presenting symptoms, sites involved, stage, pertinent diagnostic features such as physical exam and radiologic findings, histology, morphology, flow, tumor markers, and cytogenetics)
  - Name of treating institution/physician
  - Complications and significant events
  - Transfusion history
  - Hepatitis C and HIV history/test results
  - Adverse drug reactions/allergies
  - Date treatment completed
  - Date of any relapses or second malignancy and associated treatment
- **Therapeutic summary**, including:
  - **Treatment protocol** number and description, if applicable
  - **Chemotherapy** agents, including:
    - Route of administration for all agents
    - Cumulative doses for alkylators, heavy metals, bleomycin, and anthracyclines (many programs calculate cumulative doses for all agents used)
    - Designation of "high dose" versus "standard dose" for methotrexate and cytarabine ("high dose" refers to any single dose  $\geq 1000$  mg/m<sup>2</sup>; "standard dose" refers to all single doses  $< 1000$  mg/m<sup>2</sup>)
  - **Radiation therapy**, including:
    - Field(s)
    - Laterality (if applicable)
    - Start/stop dates
    - Total radiation dose, number of fractions, dose per fraction, and boost dose/location (if applicable). Record doses in Gy (1 Gy is 100 cGy or 100 rads)
    - Radiation type (e.g., proton, photon)
    - Institution/facility and treating radiation oncologist
  - **Hematopoietic cell transplant(s)**, if applicable, including:
    - Type(s)
    - Date(s)
    - Conditioning regimen(s)
    - GVHD prophylaxis and/or treatment, if applicable
  - **Surgical summary**, including:
    - Dates of surgical procedures
    - Names of procedures
    - Site (and laterality) of procedure, if applicable
- **Potential long-term effects** by organ system
- **Recommendations** for necessary screening tests and follow-up exams based on age and treatment received

## STRUCTURING THE CLINIC VISIT

**D**uring the initial comprehensive LTFU clinic visit, the medical, family, and psychosocial history should be reviewed. The team should decide which members will collect each component of the history (e.g., the social worker or psychologist may assume responsibility for the psychosocial details, whereas the clinician may focus on the medical and family history). In a multidisciplinary clinic, to avoid repetition, it is important that not every member of the team ask the same questions. However, critical history may be missed if important questions are not assigned to a specific team member.

The focus of the history should be relevant to the treatment exposures that the survivor had. The COG *Long-Term Follow-Up Guidelines* should be used as a reference to identify history questions relevant to the survivor's exposures.

The physical exam should be performed by the clinician (nurse practitioner, physician, or physician assistant) evaluating the patient. A comprehensive exam should be performed, with a focus on organs at risk due to the underlying disease and therapeutic exposures. It is important to identify portions of the exam that cannot be performed in your clinic setting. For example, pelvic examinations or vision screening may require referral to a subspecialist. The *Long-Term Follow-Up Guidelines* should be used as a reference to identify critical components of the physical exam worthy of focus.

Health counseling should be done by the clinician or nurse coordinator and targeted to the survivor's treatment exposures. "Health Links" (patient education materials accompanying the COG *Long-Term Follow-Up Guidelines*) can be reviewed with the survivor during the visit, and a copy given to the survivor for further review at home. Emphasis on a healthy lifestyle should also be discussed during this visit. For example, avoidance of tobacco use, and the importance of a healthy diet and adequate exercise should be stressed. Documentation of health counseling should be recorded in the patient's medical record.

A comprehensive psychosocial assessment should be done by the social worker or psychologist. This interview should elicit information related to the impact of the cancer diagnosis on the survivor's current psychosocial adjustment. In addition, crisis intervention services and referral to local behavioral health providers in the community are key psychosocial services that should be provided as indicated.

The need for subspecialty care will be dictated by the survivor's underlying medical conditions and the effects of the cancer diagnosis and its treatment. Attention should be paid to thorough follow-up of active medical problems as well as screening for asymptomatic complications. As survivors reach adulthood, facilitating the transition from pediatric to adult medical care providers may be a primary goal of some late effects clinics.

*"At our institution the NP who completed the chart review and screening recommendations is responsible for the flow of that particular patient through the actual clinic day. Responsibility falls on this NP to educate the patient on their disease/treatment, the actual and potential late effects, and ways to promote wellness. Also, the responsible NP receives all multidisciplinary notes, obtains lab and screening results, makes necessary referrals, communicates the plan to the team at the post follow up meeting and summarizes the visit."*

*- Kathy Martin, RN, CPNP  
Carolinas Medical Center, Charlotte, NC*

## POST-CLINIC FOLLOW-UP

**P**ost clinic follow-up begins immediately after the clinic visit. A meeting to summarize patient status and further recommendations should be scheduled and held on a regular basis. In an effort to minimize the number of meetings, some centers may combine follow-up meetings with the subsequent clinic's pre-planning session, while other centers "wrap up" an active clinic day with a short team conference. Key components of post clinic follow-up include sharing and discussing the impressions of the various team members, tracking results of lab work and screening tests, making referrals, summarizing the patient visit in writing and managing contact/ongoing communication. Most centers have a single staff person responsible for summarizing the entire visit. A mechanism should be developed for contacting patients who did not arrive for their scheduled clinic visits. This can be done in writing or by phone and should be documented in the medical record.

### Tracking Results/Information

A single staff member should assume responsibility for tracking results of screening tests (e.g., echocardiograms, pulmonary function tests). These results need to be forwarded to the staff person responsible for the patient's overall summary, so that necessary interventions (such as making referrals or ordering additional tests) may proceed promptly and be available for discussion at the next follow up meeting.

In addition to test results, receipt of notes from multidisciplinary team members who evaluated the patient is critical to summary development. Incorporation of notes from social work, nutrition, and other team members is as important to the summary as the physical exam. Thus, the staff person responsible for summarizing the patient's visit should collect these data.

### Making Referrals

Many childhood cancer survivors will require some level of care from subspecialists. Referring patients to subspecialists with expertise and interest in cancer survivors is ideal, but not always possible. As LTFU clinics are developing, emphasis should be placed on networking with subspecialists to help develop their interest and expertise in the unique population of childhood cancer survivors. Many LTFU programs follow patients from large geographic areas, so locating subspecialty caregivers close to the patient's home is helpful. As LTFU clinics become more established, relationships with specific subspecialists may become apparent and help direct referrals. Common subspecialty referrals include:

- Audiology/ENT
- Endocrinology
- Cardiology
- Pulmonology
- Ophthalmology
- Nephrology
- Gynecology
- Reproductive endocrinology
- Orthopedics
- Psychology/Neuropsychology
- Adult primary care or internist

Other specialists to consider include:

- Developmental medicine
- Neurology
- Genetics
- Surgery (general, plastics, etc)
- Gastroenterology
- Urology

### Summarizing the Visit

Summarizing the LTFU visit within a single document can accomplish several goals. The visit summary is a valuable tool for educating and counseling patients regarding their specific risks and the subsequent need for continued monitoring. It is also an informative tool for primary healthcare providers to assist them in directing further care. Finally, the summary can be used for reimbursement documentation and subspecialty referrals, particularly for patients with late effects that result in significant functional limitations and/or disabilities.

The following pertinent information should be available at the time the visit summary is developed:

- Medical records
- Treatment summary
- Multidisciplinary notes (e.g., history and physical, social work assessment, child life summary, dietitian's assessment, information from any additional team members.)
- Data from screening evaluations (e.g., lab values, echocardiogram, pulmonary function tests, audiogram reports, imaging reports, etc.)
- COG *Long-Term Follow Up Guidelines*
- List of educational handouts provided (see Appendix 3)
- Referral list

Each LTFU clinic needs to develop a format for the visit summary document. Consideration should be given to who will receive the summary, and whether the summary can stand alone or whether it needs a letter to explain the findings.

Most clinics send the visit summary to the primary and/or referring healthcare provider and to the patient or parents. The LTFU clinic staff should decide if the same summary will be sent to the patient, or if a different "lay" format will be used. In addition, consideration should be given to documentation for subsequent visits. Some programs send the complete summary only after the initial visit to the LTFU clinic and send a shorter version at subsequent visits. Other uses for the visit summary include annual updates to agencies involved with the survivor's care (e.g., Medicaid) and documentation in the medical record.

### Standardizing Documentation

Templates help to standardize and decrease the time required for clinic documentation. Consideration should be given to developing or using pre-existing templates for the following (Samples in Appendix 1 and 3):

- Treatment summary
- Visit summary
- Letter to primary care provider
- Referral letters
- Letter to patients/family

### Managing Ongoing Communication

Once the visit summary (and letters, if applicable) are complete, distribution of information is critical for ongoing communication. The following is a potential distribution list for LTFU clinic communications:

- Primary care provider
- Medical chart
- Involved specialists (e.g., endocrine)
- New referrals
- Patient/family

*"Each team member documents their encounter on a progress note, which is placed in the chart. The NP incorporates the individual notes into the main summary which is sent to the primary care provider and subspecialists."*

*- Kathy Martin, RN, CPNP  
Carolinas Medical Center, Charlotte, NC*

### Patients Lost to Follow-Up

Finding patients lost to follow-up and bringing them back into the healthcare system will minimize potential long-term problems, enhance the patient's quality of life, and is potentially more cost-effective. In addition, capturing data from patients lost to follow-up is critical to the success of future clinical trials development. Therefore, developing a system for tracking patients is important. If a scheduled patient does not keep an appointment, a follow-up letter and/or phone call may be necessary to reschedule.

Locating patients can sometimes be challenging. The institutional CRA and/or tumor registrar are adept at searching for patients lost to follow-up. Also, social workers may provide insight into community resources that may link you to a patient who is lost to follow-up. When standard attempts to contact a patient regarding a LTFU appointment fail, additional strategies may include:

- Contacting the primary care provider
- Contacting the last known employer
- In the U.S., checking the Social Security Death Index (<http://ssdi.rootsweb.com/>) to determine if the patient is deceased
- Contacting next of kin, if contact information is available
- Utilizing professional tracking agencies

Individual institutions will need to determine HIPAA and other compliance factors related to tracking patients, and set their own limits as to how many "reminders" are acceptable before assuming a patient is "lost to follow up". Some centers send a letter to "lost" patients stating that there is no longer a patient-provider relationship as a result of multiple missed or cancelled appointments. (This decreases the risk of the LTFU clinic being accused of "abandonment of care"). Always become familiar with and follow your institution's policy regarding release of medical information prior to contacting anyone other than the patient directly.



## BILLING AND FINANCIAL ISSUES

*“We feel our survivors should begin to assume responsibility for their healthcare, and this includes knowing the extent of their insurance coverage. Within our appointment confirmation letter are instructions to check level of coverage with their insurance carrier, prior to their annual long-term follow-up visit. We teach patients that they need to call the 800 number on the back of their insurance card, and inquire as to whether our clinic is within their 'network' and whether services will be reimbursed.”*

*- Marcia Leonard, RN, PNP*

*Coordinator, LTFU Clinic, University of Michigan*

**P**atient billing and reimbursement issues are directly related to the type of healthcare system with which the LTFU clinic is associated. For institutions located in countries with universal healthcare coverage, and for institutions that receive philanthropic or research funding to support their LTFU services, these issues may not be relevant. However, for the majority of institutions in the United States, billing and financial issues are often the determining factors in survivor access (or lack thereof) to the LTFU clinic and associated screening tests and subspecialty care.

### Coding/Billing

In order to seek reimbursement from insurance carriers in the United States, clinics must first generate a diagnosis code (ICD-9-CM; International Classification of Diseases, 9<sup>th</sup> Revision, Clinical Modification) for the visit; most commonly this is the survivor's cancer diagnosis (e.g., leukemia). All services performed are then billed using CPT (Current Procedural Terminology) codes.

In addition to use in federal programs (Medicare and Medicaid), CPT is used extensively throughout the United States as the preferred system of coding and

describing healthcare services. CPT codes differentiate between levels of service and incorporate physical examination, evaluation, treatments, conferences with or concerning patients, preventive pediatric and adult health supervision, and similar medical services, such as the determination of the need for and/or location of appropriate care. There are strict criteria that define the complexity level of an outpatient clinic visit. The highest level translates to the highest patient bill, and the greatest reimbursement to the clinic/hospital.

Reimbursement generated directly for the clinic is almost exclusively derived from clinician billing, which should be done utilizing the highest levels of available billing codes, with consideration given to:

- Time spent reviewing referrals
- Physical exams
- Consultations
- Documentation
- Referrals to additional subspecialists

Meeting with billing specialists from both the facility and professional billing departments, as well as with specialists in the medical coding offices will help to ensure that the clinic or institution will receive the maximum potential reimbursement.

### Reimbursement Issues

Those familiar with the comprehensive (and often-lengthy) clinic visit required for LTFU care understand the amount of time and effort necessary to ensure that the patient receives high quality care.

To offset the costs associated with developing and running a LTFU program, it is important to consider the potential reimbursement generated for the clinic/institution. Some of the tests or procedures commonly required during an evaluation include:

- Lab work (blood, urine)
- Echocardiogram
- EKG
- Audiogram
- Neuropsychological evaluation
- Pulmonary function testing
- Chest x-rays

These tests, although not directly revenue-generating for the clinic, do generate revenues for the institution, especially if done “in network.”

### Reimbursement Issues for NPs

The rules and regulations for NP practice vary from state to state. The Pearson Report provides a comprehensive summary of each state’s practice realities and healthcare practice specifics. Each center should determine how NP billing should be handled in light of their current state regulations. The Pearson Report is updated annually; the 2007 version can be accessed on-line at

[http://www.webnp.net/images/ajnp\\_feb07.pdf](http://www.webnp.net/images/ajnp_feb07.pdf)

### Conclusion

A Long-Term Follow-Up Program is a uniquely different entity than a standard hematology/oncology outpatient clinic. Clinic preparation, clinic visits, and follow-up are labor intensive. When launching a new program, phasing the program in at a reasonable pace and obtaining the commitment of key personnel can be instrumental in establishing a successful program.



## SECTION 4: SURVIVORSHIP RESEARCH

### EDITOR:

**Kathleen Meeske, RN, PhD**

*Assistant Professor, Keck School of Medicine*

*University of Southern California*

*Director, Health Outcomes and Cancer Control Research,*

*HOPE Program, Childrens Center for Cancer and Blood Diseases*

*Childrens Hospital Los Angeles, Los Angeles, California*



## CANCER SURVIVORSHIP RESEARCH

*“Cancer survivorship research encompasses the physical, psychological, and economic sequelae of cancer diagnosis and its treatment among both pediatric and adult survivors of cancer. It also includes within its domain, issues related to healthcare delivery, access, and follow-up care, as they relate to survivors.*

*Survivorship research focuses on the health and life of a person with a history of cancer beyond the acute diagnosis and treatment phase. It seeks to both prevent and control adverse cancer diagnosis and treatment outcomes, such as late effects of treatment, second cancers, and poor quality of life, to provide a knowledge base regarding optimal follow-up care and surveillance of cancers, and to optimize health after cancer treatment.”*

*- NCI-Office of Cancer Survivorship, 2004*

The advances in the treatment of childhood cancer over the past four decades and the resultant increases in rates of survival can largely be attributed to a pediatric oncology ethos that highly values a rigorous scientific approach to the care of children with cancer, including careful evaluation of treatment regimens through collaborative research.<sup>27</sup> Cancer survivorship research in pediatric oncology (research focused on long-term survivors of childhood cancer) has allowed us to anticipate certain organ-specific complications, potential secondary malignancies, and psychosocial issues.<sup>15</sup> Much research is still needed to refine chemotherapy regimens that will minimize late effects without compromising survival rates, as well as to determine effective interventions for screening and managing late effects.<sup>28-30</sup>

Cancer survivorship research is a formal, systematic approach to both identifying and examining the various late complications of childhood cancer.<sup>31, 32</sup> Whether the focus of a specific research study is a physical, psychosocial, or care-delivery issue, the overall objective of cancer survivorship

research is to improve medical outcomes and enhance quality of life in cancer survivors. As an integral part of a comprehensive LTFU program, cancer survivorship research is an important means of identifying measurable outcomes, and further supports the need for comprehensive survivor programs. Ideally cancer survivorship research is collaborative in nature, but often the research process begins with smaller descriptive studies conducted at a single institution.

Survivorship research is characterized by focus and usefulness. Some common areas of focus in survivorship research include:

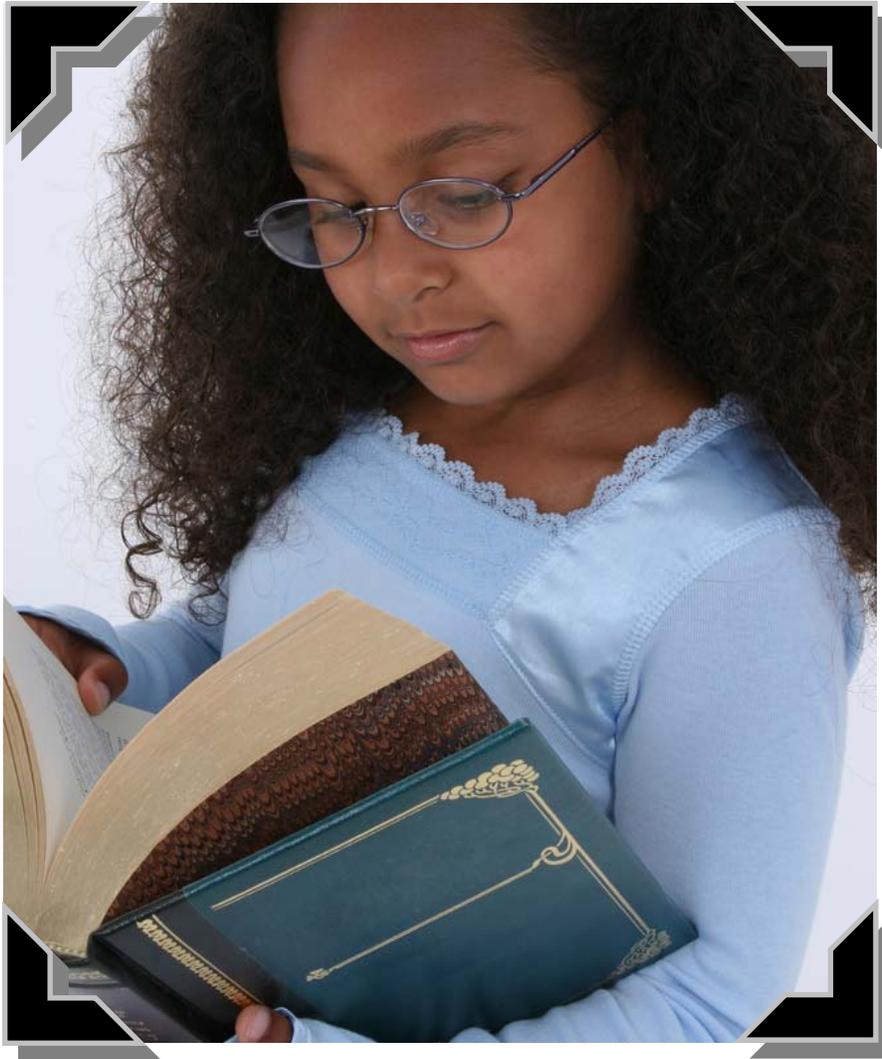
Research Focus	Example
Disease	▪ Childhood brain tumor
Treatment exposure	▪ Cranial radiation
Age group	▪ Adolescents
Concept	▪ Uncertainty ▪ Decision-making
Symptom	▪ Fatigue ▪ Cognitive impairment

Research about late effects following childhood cancer can be used to:

- Build a body of knowledge
- Build evidence-based practice in pediatric oncology
- Improve outcomes for childhood cancer survivors

- Improve treatment and outcomes for future pediatric oncology patients

Ultimately, research regarding late effects can be used to improve the cancer experience and a wide range of outcomes for people who have been treated for childhood cancer and for their families, as well as for those children who will be diagnosed and treated in the future.



## IDENTIFYING RESEARCH PRIORITIES

**S**urvivorship research has been carried out on a wide range of subjects, including cognitive issues in patients following cranial radiation, risk of breast cancer in patients who have received mantle radiation for Hodgkin lymphoma, and quality of life in childhood cancer survivors. There are still many topics to be explored. For instance, we have a very poor understanding of how cancer treatment affects the normal aging process. Ultimately, ongoing identification of research priorities will be critical to improving the quality of care for long-term survivors of childhood cancer; however, research priorities will vary among LTFU programs depending on multiple factors, including institutional resources, population and expertise. Things to consider when identifying research priorities include:

### Research Focus:

- Is the problem significant?
- Will this research contribute new knowledge to the field?
- Is the topic of genuine interest to the researcher?

### Feasibility:

- Can the question be answered?
- Is this a moral or ethical problem for which there is no right or wrong answer, but rather an opinion?
- Can the problem be studied in the allotted time frame?
- Can enough subjects be accrued within the time constraints?

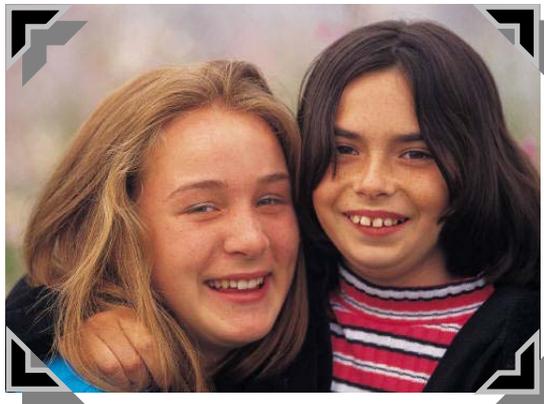
- Will subjects be willing to comply with study requirements?
- What facilities and equipment will be needed and are they available to the researcher?
- Is funding available?
- Are the budgeted costs appropriate for the expected procedures and manpower necessary?

### Research Team:

- Does the researcher have sufficient knowledge and expertise in this area?
- Is the researcher familiar with the instruments that will be used to collect the data?
- Does the problem require expertise from multiple disciplines (such as nurses, physicians, psychologists, social workers, child life specialists, dietitians, neuropsychologists)?

### Regulatory Issues:

- Are there measures in place to protect the patient's rights and privacy?
- Will the Institutional Review Board (IRB) have any problems with the study design (particularly in the area of ethics)?
- If the sample includes children, will parents be willing to allow their children to participate?
- What is the process for re-addressing consent as minor children reach adulthood?



## CONDUCTING SURVIVORSHIP RESEARCH

**A**n institutional electronic clinical database is an essential element to be considered when establishing a program of comprehensive LTFU care. Electronic clinical databases for long-term survivor programs may be an extension of the clinical database that already exists in the institution's general pediatric oncology or transplant program. If there is not an existing electronic clinical database for the institution's pediatric oncology program, creating a basic LTFU database should be an initial goal of the LTFU program.

### Clinical Databases Set the Stage for Cancer Survivorship Research

Microsoft Access® and Microsoft Excel® are widely available user-friendly software programs that can be used to enter, summarize, search and analyze clinical data and support survivorship research. A feasible and generally useful clinical database is comprised of basic elements that can be queried to identify persons who are potentially eligible for a study. For example, one could query for the number of patients who have a specific diagnosis, are within a specific age range or are a specific number of years off therapy, etc.

### Developing a Clinical Database

Basic elements of a clinical database that can be used for survivorship research include:

- **Demographic data:** Name, date of birth, gender, race/ethnicity and contact information (address, home and/or work telephone, cell phone and email for both the survivor and an alternate contact, i.e., someone who will always know where the patient can be reached). Complete current contact information is critical to both quality clinical care for long-term survivors and to reduce potential sampling bias in cancer survivorship research.
  - **Disease-related data:** Childhood cancer diagnosis, date of diagnosis, disease stage, and significant histological and biochemical features.
  - **Treatment-related data:** May include dates of initiation and completion of therapy, therapeutic exposures, and specifics regarding treatment, such as radiation fields and doses, cumulative chemotherapy doses, etc.
  - **Clinical outcomes:** May include results of tests and procedures, known late effects, and an objective rating of late effect severity per the Common Toxicity (CTC) criteria.
  - **Other program-specific data:** May include data specific to specialized programs, such as neuro-oncology or transplant evaluation measures.
- Other considerations in the development and maintenance of a high quality institutional database for long-term follow-up include:
- Who will be included in the database? When starting a LTFU program, the emphasis should be on enrolling long-term survivors in the database. While ideally patients would be entered into the database at diagnosis so treatment exposures can be tracked and entered in real-time, few institutions have sufficient resources to do so. For most programs, the initial step may be either enrolling patients attending the LTFU clinic, or entering all patients at the institution when they complete active therapy. The latter is preferable, for this allows a determination of the entire population of survivors at the institution, and not just survivors who attend the LTFU clinic.
  - When will data be collected? Medical record abstraction and data entry can take place in advance of the patient's visit, with review and update of the

information (especially the patient's contact information and information about actual late effects and their severity) being done at the clinic visit. For returning patients, especially for late adolescent and young adult survivors whose care has been transitioned to an adult oncology or primary care provider, changes in demographic information (name, address, telephone numbers, email address) and late effects or other data elements can be updated at the start of the annual clinic visit, or during a "virtual" visit by phone or mail for those who are not seen in person on an annual basis.

- **How can quality data collection be assured?** Rigorous training in medical record abstracting, patient interviewing and data entry for all personnel who will be engaged in these activities is fundamental to the development of a complete and accurate clinical database that can be useful for research. Developing systems for updating contact information is critical if quality research is to be conducted in your LTFU program. Study results are potentially biased if a large number of patients cannot be located and included in the study.
- **How will the data be collected?** There are several potential methods for data collection in LTFU programs. Possibilities include:
  - Patients complete standardized paper-and-pencil data collection forms prior to their LTFU visit (see Appendix 3 for sample clinic intake forms)

- A clinician elicits and records information during the clinical interview using standardized data collection forms
  - Patients or interviewers enter responses directly into a computerized database
  - Data are collected by mail or telephone surveys or through in-person interviews conducted outside of the standard LTFU clinical encounter. This type of data collection may be preferable if there are competing demands for time and space in the clinical setting
  - Whatever data collection method is selected for use in developing the clinical database, it should be used consistently to allow meaningful comparisons between patients or groups of patients over time
- **Who will provide information?** Survivors age 18 and over can generally respond for themselves, unless they are cognitively impaired or developmentally unable to complete the forms. Younger survivors may complete age-appropriate forms with parent/guardian consent. Family members can be proxy respondents for children too young to complete the forms and for those survivors who are cognitively impaired or developmentally delayed. For survivors being screened for problems with memory, attention, or psychological distress, the perspective of the parent or spouse may be essential.

*"We designed a very basic Excel® database when we started our Long-Term Follow-up Program. We were fortunate to have a medical student join us for a summer. He upgraded our system while keeping it user-friendly."*

*- Kathy Meeske, RN, PhD  
HOPE Program, Childrens Hospital Los Angeles*

### Regulatory Issues

An essential component of developing institutional data collection procedures is obtaining Institutional Review Board (IRB) approval (or the approval of a similar regulatory oversight body). Generally, clinical databases developed solely to track patient visits, capture other clinical information, and improve patient care do not require IRB approval as long as the data are stored and utilized only for clinically related matters. However, if the healthcare provider plans to use the clinical database to answer research questions that arise over time, then IRB approval is required. Therefore, it is important to consider submitting an IRB application for general data collection at the time you are developing the clinical protocol for your LTFU program. The essential components of an IRB application include:

- Specific protocol to be followed for collection of personal health information that will be entered into the database
- Sample recruitment materials (e.g., letters or telephone scripts) that will be used when contacting potential research subjects to introduce a study
- Identification of specific members of the research team who will have access to the data, along with assurance from the principal investigator that all members of the research team will have training in IRB and HIPAA regulations
- Explanation of the research questions and protocol to be followed for data collection in layman's terms
- IRB approvals from other institutions (if there are research partners/collaborators outside of your institution)
- Consent documents for:
  - Participants 18 years of age or older
  - Parents/guardians of participants under 18 years of age

- Participants between 7 and 17 years of age (assent form documenting the minor's willingness to participate)
- Patients previously consented as minors, who have turned 18 during the course of the research or data collection

Although you may have a clinical database for your LTFU clinic, you generally cannot access this patient data for research questions unless specific consent is obtained. It is recommended that you consult with your IRB concerning your institution's requirements for research databases. In addition to IRB consents, you may need to obtain Health Insurance Portability and Accountability Act (HIPAA) consents for each element of personal health information (PHI) that can be made available to those not directly involved in the patient's care, including the research team or others involved in the study.

Consider submitting and obtaining an IRB approval from your institution for general data collection and follow-up of your patient population. For example, you can submit an IRB application requesting survivor consent to store his/her demographics, disease characteristics, treatment received and identified late effects, making it available (without patient identifiers) for future analyses.

In summary, although you may not have a specific research question in mind at the time you are developing your survivorship clinic, in recognition that research is an essential part of improving the care of this at-risk population, consider developing a general research protocol that would allow you to store data that can be used to answer questions that may arise over time.

*"The IRB at our institution asked us to develop a standard operating procedure (SOP) for our database. In the SOP, we had to address issues such as database security and access. I would recommend that you meet with a representative of your IRB, as regulations regarding databases are evolving rapidly and are institution-specific."*

*- Kathy Meeske, RN, PhD  
HOPE Program, Childrens Hospital Los Angeles*

**Research Opportunities within COG**

One of the first steps in incorporating survivorship research into a new LTFU program may be the implementation or facilitation of late effects studies that are open within COG. Your program may participate in COG late effects research by opening a new late effects study and/or facilitating accrual on a study that is already open at your institution.

Current COG late effect studies that are open to patient accrual are listed in Table 6 and also can be accessed on the Children's Oncology Group member website at <https://members.childrensoncologygroup.org> (click "Protocols" and then "LTE"). Obtain specific information regarding a study's eligibility and methodology by downloading the protocol from the COG website.

**Table 6: Currently Open COG Late Effects Studies\***

<b>PROTOCOL</b>	<b>TITLE</b>	<b>DATE OPENED</b>
ALTE02C2	Neurobehavioral Outcomes in Childhood ALL	May 2004 (Limited institutions)
ALTE03N1	Key Adverse Events after Childhood Cancer	March 2004 (Groupwide)
ALTE04N1	Health Related Outcomes for Hodgkin Disease Survivors	October 2004 (Limited institutions)
NWTSG 4941L	National Wilms Tumor Late Effects Study	October 1995 (Groupwide)
ACNS0331	Newly Diagnosed Standard Risk Medulloblastoma: Limited Target Volume Boost Irradiation & Reduced Dose Radiotherapy and Chemotherapy	June 2004 (Groupwide)
ACNS0221	Conformal Radiation in Low-Grade Gliomas	November 2005 (Groupwide)
AALL0331	Standard Risk B-precursor Acute Lymphoblastic Leukemia (includes longitudinal assessment of health-related quality of life)	April 2005 (Limited institution for HRQL component)
AOST0331	A Randomized Trial of the European and American Osteosarcoma Study Group to Optimize Treatment Strategies for Resectable Osteosarcoma Based on Histological Response to Pre-Operative Chemotherapy	November 2005 (Groupwide)

\*As of September 2007

## **The Research Process**

Clinical practice can spark potential areas of interest in survivorship research; for example, observation of a pattern of multiple occurrences of a distressing symptom in patients or their family members, or a desire to identify or establish an evidence base for current practices or practice improvements. Other sources that can inspire potential areas of interest are the scientific literature, calls for applications for grant funding in an area related to long-term childhood cancer survivors and/or late effects, previous work in programmatic survivorship research about late effects or other issues of relevance to long-term childhood cancer survivors, and strategic thinking about future programmatic research.

### **Steps in the Research Process**

The following are essential steps to follow when designing and conducting your own research study.<sup>33-35</sup> A flowchart summarizing this information is presented in Figure 1.

#### **1. Define the research question.**

Determine a general topic or clinical problem and then discuss your ideas with others, narrowing the focus to a specific research question. Consider the potential implications of findings related to this research: Is this question worth your time and effort to study? Is it a new idea? How will patients or healthcare professionals benefit from your research?

**2. Review the literature.** Determining what is known and identifying gaps in the literature are critical in the development of a research project. Reviewing previous studies helps the investigator identify a suitable framework for the study, which in turn guides the selection of relevant variables and suitable methods and measures. The process of conducting the literature review also may present an opportunity for developing a review or clinical paper for publication.

#### **3. Refine the research question and develop a research concept.**

Based on the literature review, the research question may need further refinement. Once this is accomplished, it is a good idea to write up a brief research concept proposal and have this reviewed and approved by the individuals whom you have identified as key to the success of your project. In some institutions, a research concept may be required as part of the formal approval process. Feedback from this process will be valuable as you develop your research proposal.

In order to obtain meaningful analysis, some cancer survivorship research requires larger numbers of survivors than may be available at a single institution. For example, a randomized control trial (RCT) assessing the outcomes of a specific intervention in comparison to those who receive “standard of care” would normally require multi-institutional recruitment because, for this research design, the sample size must be large enough to allow the detection of a statistically significant difference between the two groups, if one exists. The researcher could collaborate with clinicians and scientists at other centers and/or use a pre-existing database to recruit for the study.

#### **4. Develop the research protocol.**

The research concept should now be used as a platform for development of the full research protocol which should include title, abstract (summary), background, aims/objectives, hypothesis, eligibility criteria, conceptual framework, study design, sampling, variables, statistical analysis, identification of study measures and instruments, ethical considerations, risks and benefits, and determination of the composition of your research team.

Adding research expertise to your team is key to developing the research question(s) and methods. The type of expertise that will

be needed to conduct a study becomes clearer as the research topic and questions evolve. Bring together a core team of experts in key areas. The study will develop further based on the interests and perspectives of the various experts who form the research team. The research team should include individuals from multiple disciplines who have essential and complementary skills including study design, theoretical frameworks, statistics, database design and programming, grantsmanship, and clinical expertise.

Considerations for institutional support may include access to populations of interest and potential research participants, existing systems for obtaining, processing and storing research data (including tissue samples and medical record information), and availability of research office space and clinical facilities (including a private area for obtaining informed consent and conducting data collection).

**5. Develop a budget and identify funding sources.** Institutional and financial support are also important for the development of survivorship research within a program of

comprehensive LTFU care for childhood cancer survivors. Consider both internal and external sources of funding. Potential funding sources are listed in Table 7.

**6. Prepare and submit your IRB application.** Once the research plan is in place, you should proceed with the process of obtaining regulatory approval to conduct the study. Many funding agencies will not release funds until there is IRB approval for the research project.

**7. Collect your data.** Follow the plan approved by your IRB to collect your data. Be sure measures are in place to assure data security and confidentiality.

**8. Analyze your data.** Perform the statistical analysis as outlined in your research plan and then interpret your findings.

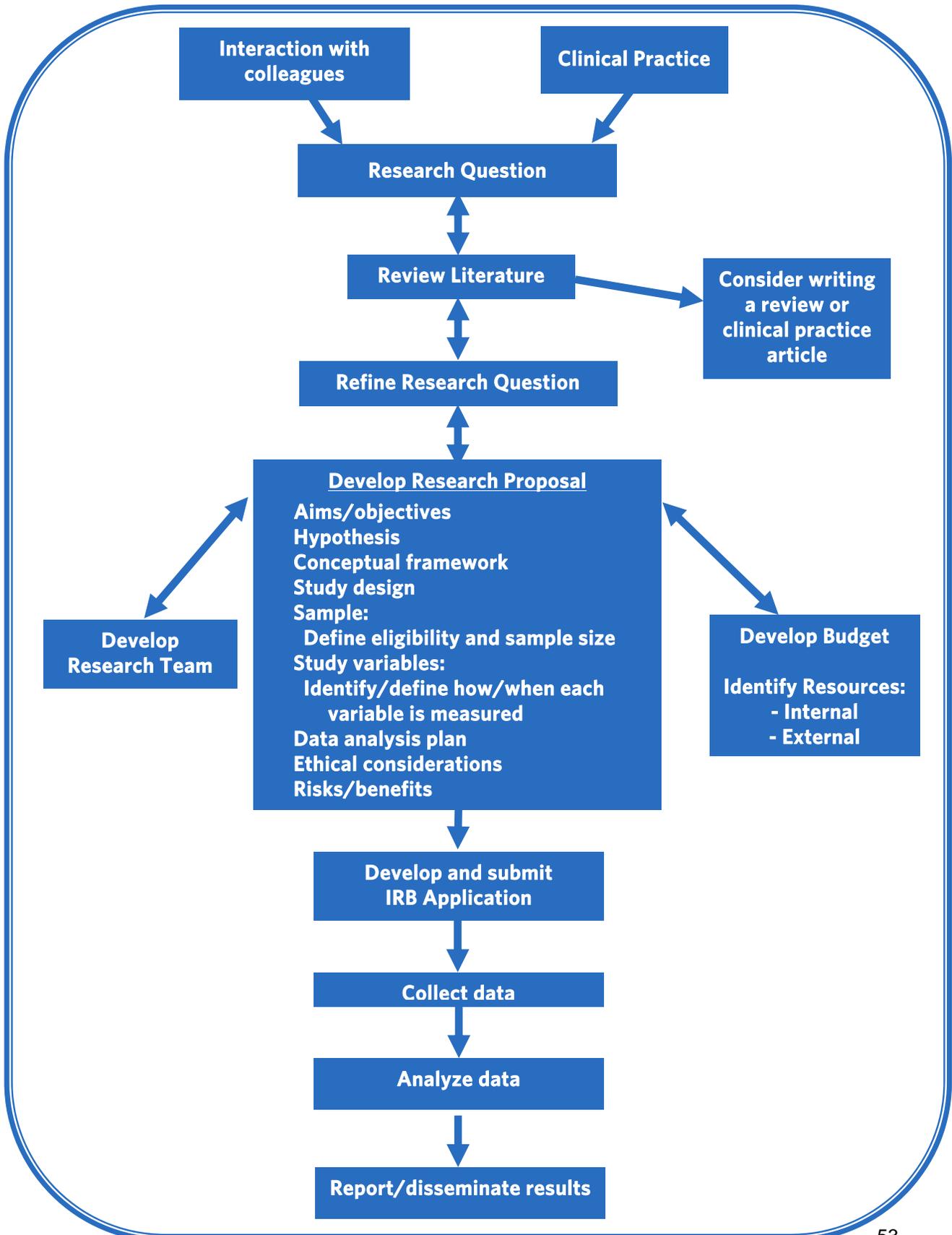
**9. Report your results and disseminate your findings.** Prepare manuscripts for submission to scientific journals, poster abstracts, and conference presentations. Let the world know the results of your research!

*"We recently published a case report because the late effect we detected in a long-term survivor of childhood cancer had not been previously reported in the literature."*

*- Mary Nelson, RN, MS  
HOPE Program  
Childrens Hospital Los Angeles*



Figure 1: Development of a Research Project



**Table 7: Examples of Potential Funding Sources for Survivorship Research**

**Professional Organizations**

- Oncology Nursing Society [www.ons.org](http://www.ons.org)
- Sigma Theta Tau [www.nursingsociety.org](http://www.nursingsociety.org)
- National Association of Pediatric Nurse Practitioners [www.napnap.org](http://www.napnap.org)
- Association of Pediatric Hematology Oncology Nurses [www.aphon.org](http://www.aphon.org)

**Institutional**

- Fellowships (e.g., St. Jude EBM fellows, Research Scholars)
- Departmental research awards
- P20, P30, P50-funded Center pilot studies program
- NCI Comprehensive Cancer Center pilot studies program

**Private Agencies and Foundations**

- American Cancer Society
- Lance Armstrong Foundation
- Hartford Foundation
- National Brain Tumor Foundation

**Corporations**

- Computer hardware and software
- Pharmaceuticals
- Electronic devices
- Healthy lifestyle

**Government**

- National Cancer Institute (NCI) [www.cancer.gov](http://www.cancer.gov)
- NCI Office of Cancer Survivorship <http://dccps.nci.nih.gov/ocs>
- National Institute of Nursing Research (NINR) [www.ninr.nih.gov](http://www.ninr.nih.gov)
  - Career development awards (K-level awards)
  - R-level awards (for example R01, R03, R21)
- National Institute of Health (NIH) Research Training Opportunities:
  - National Research Service Award (NRSA) <http://grants.nih.gov/training/nrsa.htm> (individual and institutional; pre- and post-doctoral)
  - National Heart Lung and Blood Institute (NHLBI) [www.nhlbi.nih.gov](http://www.nhlbi.nih.gov)

**Cooperative Clinical Trials Groups**

- Children's Oncology Group (Nursing Traineeships) <https://members.childrensoncologygroup.org/Disc/nursing/default.asp>

### Other Research Considerations

**Secondary Analysis.** If the researcher wants to answer a question from previously collected data, gaining access to the pre-existing database is necessary. Several US databases exist that may offer access to information about survivors of childhood cancer, including:

- **The Children's Oncology Group (COG)** [<http://members.childroncologygroup.org>] is a National Cancer Institute (NCI) supported cooperative clinical trials group that conducts multi-institutional studies and can provide access to previously collected data for secondary analysis. COG investigators must submit a research proposal to the appropriate study committee (e.g., Late Effects, Cancer Control, Nursing) for review and approval in order to access COG data.
- **Childhood Cancer Survivor Study (CCSS)** [[www.stjude.org/ltfu](http://www.stjude.org/ltfu)] is an NCI-funded resource established to promote and facilitate research regarding long-term survivors of childhood cancer. CCSS has enrolled 14,370 five-year survivors of childhood and adolescent cancer diagnosed between 1970 and 1986 and a sample of 3,737 sibling controls. Enrollment of a more contemporary cohort is currently in progress. CCSS has detailed information on cancer diagnosis, therapy received, and health/quality of life. The CCSS dataset is a resource that can be used to investigate questions regarding quality of life and late effects of therapy in childhood cancer survivors. Additional information regarding the process by which qualified investigators can access the CCSS dataset is available by e-mailing [ccss@stjude.org](mailto:ccss@stjude.org).

- **Surveillance Epidemiology and End Results (SEER)** [<http://seer.cancer.gov>] is an NCI resource that collects and publishes cancer incidence and survival data from 18 population-based cancer registries covering approximately 26 percent of the US population.

### Building Research Partnerships

Partnerships and cross-institutional collaboration are important because of the relatively small number of childhood cancer patients and survivors at most institutions. Sharing ideas with colleagues between and across institutions facilitates successful completion of research projects. The novice researcher should consider initiating a small working group with other colleagues from which pilot data can be obtained. The researchers can then build on their collaborative data, and potentially expand the project to include additional sites, or in some instances, expand to a COG or CCSS group-wide project once feasibility has been worked out in the smaller group setting.

- **Internal and external partnerships**  
A group of researchers within or between institutions with a similar area of interest, but often with different areas of research expertise, who regularly schedule conference calls or meetings to brainstorm ideas for research and to share opportunities for funding, publication, leadership, and teaching.
- **Clinical partnerships**  
Clinical partnerships are an effective way of promoting research within institutions that have different requirements regarding time dedicated to clinical and research responsibilities. A clinician who is interested in conducting survivorship

*"A physician and nurse team in survivorship may have an interest in examining AVN, and may require a larger sample than that available within their own institution. They may want to seek collaboration with another institution that has resources to assist in conducting this study."*

- Sheila Santacrose, APRN, CPNP, PhD  
HEROS Program, Yale University

research but has a great deal of clinical responsibility could partner with others who have more dedicated time for conducting research. Clinical partnerships may work well for multidisciplinary research studies (studies involving multiple disciplines, such as nursing, medicine, social work, psychology, and/or neuropsychology). For example, examination of the various psychological effects of cancer requires expertise in identifying these issues, and support from physicians and nurses who follow these patients and families during treatment. Another example may be the survivorship nurse who wishes to conduct a research study and who may need to seek clinical/research expertise

from psychology in order to examine coping and adjustment in cancer survivors.

#### Conclusion

Cancer survivorship research has the potential to decrease physiologic and psychological morbidity in childhood cancer survivors by addressing specific issues that have an impact on health and quality of life in this vulnerable population. LTFU clinics should strongly consider incorporating research into their program, in order to contribute new knowledge and insights that may potentially improve future outcomes for childhood cancer survivors.

*"A person with heavy clinical responsibilities is still able to contribute to the research project by recruiting study participants from their institution, participating in conference calls about the progress and findings of the study, and assisting with manuscript revisions."*

- Sheila Santacroce, APRN, CPNP, PhD  
HEROS Program, Yale University



## SECTION 5: ISSUES IN SURVIVORSHIP

EDITOR:

**Scott Hawkins, LMSW**

*Pediatric Oncology Social Worker*

*Helen DeVos Children's Hospital, Grand Rapids, Michigan*



## ADVOCACY

**P**arents and patients must learn to advocate for themselves in order to navigate through a lifetime of survivorship issues. Ideally, parents and patients should learn advocacy skills throughout their treatment. However, advocacy issues become essential in survivorship, since parents and patients must address important issues as they arise.<sup>5, 36, 37</sup>

*“If I didn’t know how to advocate for myself, I would not have received the mammogram I really needed as a survivor who had mantle radiation. My doctor said I did not need a mammogram until I was 40 years old. I insisted on a test that could possibly save my life. I was able to do this because I was educated and confident.”*

*- Angie, Survivor*

### Developing Advocacy Skills

Successful advocacy begins with education, because when parents and patients become equipped with an understanding and acceptance of survivorship issues, they become confident enough to advocate for themselves. Suggestions for assisting survivors to develop advocacy skills include:

- Make parents and patients aware that advocacy is a necessary skill, and one that will enhance survivorship
- Discuss advocacy, including how and why to be a personal advocate, during the initial LTFU visit
- Include the following in each subsequent LTFU visit:
  - Discussion and assessment of advocacy skills
  - Discussion of survivorship issues
  - Psychosocial support
  - Distribution of information and resources

### Essential Skills

Four basic self-advocacy skills have been studied and identified as essential.

- Information-seeking
- Communication
- Problem-solving
- Negotiating

These skills should be taught throughout treatment and evaluated during visits to the LTFU clinic.<sup>38</sup> It is important for survivors to be proactive in developing these self-advocacy skills in order to maximize their overall health and well-being throughout the cancer experience.

### Advocacy: What, Why, How?

Parents and patients may know intuitively that they should advocate for themselves. However, many do not understand the types of advocacy, why advocacy is necessary in order to navigate through survivorship successfully, and how they can become an effective advocate. An important goal for LTFU clinics is to educate survivors and their families so that they are able to make knowledgeable decisions about the future that are in their best interest.

*“I knew I should stand up for my child, but I would not call myself an advocate. To me, an advocate was someone who stands up for legal or financial rights. It took me a while to learn the broad scope of advocacy and what it meant for me and my child.”*

*- Mary, Parent*

### Characteristics of a successful advocate.

First and foremost, an advocate cares about the overall well-being of the survivor, regardless of whether the advocate is a parent or a survivor. Overall well-being includes both physical and psychosocial issues. An advocate must be willing to ask questions, proactively seek out information, and take some positive risks that will lead to

greater benefit in the future. Not all patients and parents will embrace advocacy in the same way or to the same degree, but fundamental education and advocacy are necessary for all survivors. It is also important to note that an advocate who stands up for an individual survivor is also advocating for childhood cancer survivors in general. The more educated the population, the easier it will become for future survivors to function.

Unfortunately, advocacy sometimes means stepping out into an area that others have not yet explored. An advocate may experience challenges along the way, such as healthcare professionals or insurance companies that are unaware of certain issues that survivors face. Because advocacy can at times be frustrating and discouraging, it is important for LTFU clinic staff to support advocacy efforts. The clinic should serve as a safe foundation where parents and survivors can develop advocacy skills. Part of this encouragement should include pointing out that advocacy skills can be used beyond the childhood cancer arena. The education and skills developed for advocacy related to survivorship can also be applied in other situations that arise, both at work and at home.

**Types of advocacy.** While each institution has its own interests in mind, parents and patients should be educated regarding national and local childhood cancer issues and initiatives. Encourage parents and patients to get involved on a national, local, and personal level. Make them aware of programs available to discuss important issues such as, but not limited to, volunteering, fundraising, laws and legislation, treatment choices, and wellness issues. Networking serves to connect survivors and their families to a much bigger picture, which in turn often allows them to find meaning and purpose in their experiences. A list of organizations that provide information and advocacy for survivors is included in Table 8.

**Promoting advocacy.** Promote advocacy skills for patients and/or parents during LTFU clinic visits. For example, structure clinic visits to allow time for questions and discussion, and for dissemination of information that will promote a better understanding of survivorship issues and ways in which to advocate. Establish an environment that is consistent, up-to-date, and comfortable. Develop a “library” of resources, including web-based technology if possible, so that parents and patients have access to information that they might not have the tools to access at home. Make the LTFU clinic a “home base” from which other resources and specialists can be accessed.

#### **Parents and Patient Advocates**

Depending on age, diagnosis, and treatment, survivors of childhood cancer may be too young or cognitively impaired to advocate for themselves. Therefore, begin survivorship education by teaching parents to advocate for their children. Parents may in turn teach their child the skills of successful self-advocacy.

*“I needed to feel like there was time for me to just talk about the issues, feelings, and struggles we were facing but not expecting to face, following treatment. Now that she was out of immediate danger, I just wanted a chance to talk about what we had been through and what was ahead for us.”*

*- Arlene, Parent*

It should also be noted that parents and patients will have unique perspectives and possibly different goals in mind for the future. Therefore, teaching parents and patients to achieve developmentally appropriate independence may be one of the essential skills taught to both parent and patient. Professional assistance may be needed to assist with the transitions that occur in the relationship between parent and patient, especially as the patient becomes more independent.

Parents and patients should also be made aware of the unique advocacy opportunities available to each of them. A parent may desire to be much more or less involved in the childhood cancer survivorship arena than the survivor, or vice versa. Therefore, both patient and parent should be equally addressed and given ample and unique opportunities to become involved.

### **Common Survivorship Issues**

An aspect of LTFU clinics that should ideally be separate from the medical aspects of the clinic is built-in time for discussion and processing. The long-term follow-up phase lacks the kind of intensity present during active treatment, but does carry a different sort of intense emotional and physical experience that can many times be eased through discussion and processing.

### **Life Immediately Beyond Treatment**

Survivors should be educated about the possible physical and emotional issues facing them and their families soon after treatment. These issues can be unique and separate from those issues survivors face further out from treatment.

**Anxiety:** Patients and their families expect and are expected to be thrilled with finishing treatment. However, the thrill of finishing treatment is most often mixed with an intense anxiety when faced with the idea of no longer actively “fighting” the disease. Addressing this issue is an important step in creating a strong foundation for future mental and emotional stability.

**Returning to Normalcy:** Parents should be educated regarding the frustration, anxiety, and depression felt by patients and members of their family when a realization is made that “back to normal” may not be a possibility and that a “new normal” may need to be established.

**Physical Effects:** Immediately following treatment, parents should be informed about what to expect for their child in terms of physical condition and ability. At this time, parents should be made aware of immediate

side effects of treatment as well as possible long-term effects.

**Future Issues:** Long-term follow-up clinics should also point out to survivors that physical and psychosocial effects of treatment are sometimes delayed and do not present themselves until many years after treatment. Addressing this possibility up-front, frankly and openly, prevents survivors and their families from feeling they are “weird,” “weak,” or “going crazy” when issues arise at a much later time.

*“I hit a huge amount of stress and had a scare that the cancer had come back and suddenly everything that I’d been locking up for the past 4.5 years (since treatment) came out. This goes so much deeper than you realize, and it’s important to have a professional, outside perspective to help you stay on top of your mental /emotional health.”*

*- Kara, Survivor*

**Long-Term Psychosocial Issues.** Dealing with a lifetime of psychosocial issues might be both unexpected and overwhelming to parents and survivors. Parents who advocate for their children find themselves dealing with their own emotions, as well as assisting their child in dealing with their own issues. Appropriate support and education on the emotional issues related to survivorship should be made available to parents for their own use as well as for the use of their child. Parents and patients may need to be made aware of the possible issues through discussion, and they should also be given the opportunity to express concerns at each clinic visit. Specific issues that need discussion are as follows:

**Post-Traumatic Stress Disorder:** Survivors and their families should be made aware of the signs and symptoms of PTSD. A discussion of the possibility of this issue may avoid the added stress survivors and/or their families may feel if they are unaware of this issue and simply feel they are “going crazy.”

**Fear of Late Complications:** Some survivors may remember hearing about a potential late complication from their doctor when they were in treatment, or they may know or have heard about other survivors developing physical late effects, such as congestive heart failure or second malignancies, years following treatment. The fear of developing a new health problem may sometimes lead to avoidance of long-term follow-up appointments in the hope that new problems will not be “discovered”. It is important to help survivors understand that participating in long-term follow-up will not cause complications to happen, and that regular long-term follow-up allows these complications to be caught early, when they are most treatable.

*“I didn’t come to the long-term follow-up clinic for a very long time. I thought ‘I am done with that – I’ve paid my dues – I don’t want to know if anything else can go wrong.’ I was really scared that they would find something seriously wrong with me, and that I just couldn’t face having to deal with that, so I thought I would just take my chances.*

*. . . But then, gradually, I began to realize that if I didn’t take charge, the cancer and everything I had gone through was going to take charge of me. Because it was always there, in the back of my mind, and I was always worried about what might happen. So I finally went in for a visit, and now I know the risks that I face. And I actually feel better knowing that, because now I have a plan to deal with it, and I know the things I can do to keep myself as healthy as possible. And if anything does go wrong, they’ll catch it early, and I’ll have a better chance of beating it. So, I never miss my appointments anymore.”*

*- Laura, Survivor*

**Fear of Recurrence:** Possibly the most universally talked about “issue” facing survivors is a very intense, sometimes debilitating fear of their cancer coming back. Parents and survivors should have the

discussion, support, and information available to them at LTFU clinics to address this fear. This is one area in particular where the “voice” of other survivors aids in easing the two-fold anxiety: (1) that the cancer will come back and (2) that you are obsessing about the cancer coming back.

*“I am constantly fighting a battle inside my head. One side of me constantly worrying that I will get sick again, the other side fighting what could become my obsession. It helps me so much to hear that other survivors are feeling the same way. At least I know this is normal.”*

*- Angie, Survivor*

**Social Relationships:** Having experienced a life-threatening situation at such an early age certainly affects the social relationships of the survivor and the family. Survivors struggle with many questions: How do I tell people I am a cancer survivor? What are people going to think? Why do people not understand me? Will anyone want to date me? Is it okay for me to have sex or be on birth control pills? Will my parents ever let go of me enough to let me be a ‘normal’ teenager/young adult? These are just a few of the many questions facing survivors as they approach different stages and situations in life. Again, open and frank discussion of these sensitive topics may prevent unnecessary hurt and stress.

*“I can’t have kids because of my treatment. When do I tell a girl that? Do I wait until we are really involved, or should I tell her upfront? What woman is going to want to be with a man who can’t have kids? I am trusting the right person is out there for me, but it is something I struggle with daily.”*

*- Jon, Survivor*

**Self-Esteem/ Self-Confidence Issues:** Depending on the type of treatment they received, survivors may face possible life-long effects of cancer, such as an amputation or cognitive damage. If the

impact of these effects is not addressed in terms of self-esteem, a person's ability to function in particular situations can be adversely affected. Low self-esteem can also severely limit a person's visions and goals. Discussion and support of this particular issue is vital in LTFU clinic visits. Learning to advocate for oneself generally increases self-esteem and confidence.

**Long-Term Physical Effects of Treatment.**

Managing the long-term physical effects of treatment is an overwhelming, daunting, and complicated task for most survivors. Without a central location, such as a LTFU clinic, from which to coordinate follow-up, many survivors are left without appropriate follow-up care. Appropriate information must be given out at each clinic visit to ensure the education of the survivor. Ultimately, the survivor knows his/her own body best. Still she/he must be "armed" with evidence to present to family care practitioners, ER doctors, or others with whom the survivor comes in contact.

*"I went to student health for something little. After I rattled off my long medical history, the doctor was afraid to treat me and wanted to order several unnecessary tests. It is very frustrating to know more than the doctors about yourself and have to convince people all the time of what you know is right. Survivors need help coordinating their care."*

*- Kara, Survivor*

Appropriate information should be given to survivors regarding late effects of treatment and appropriate screening. In addition, LTFU clinic visits should include discussion and teaching regarding potential cognitive changes, the developmental implications of cancer therapy during childhood, how to talk to other healthcare providers about issues related to childhood cancer survivorship, and preparation for the transition to the adult healthcare system.



Table 8: Information and Resources for Survivors

<p><b>About Face</b>  <a href="http://www.aboutfaceusa.org">http://www.aboutfaceusa.org</a>  888-486-1209</p> <ul style="list-style-type: none"> <li>• Oral, Head and Neck</li> </ul> <p><b>Alliance for Technology Access</b>  <a href="http://www.ataccess.org">http://www.ataccess.org</a></p> <ul style="list-style-type: none"> <li>• Technology access resources for children and adults with disabilities</li> </ul> <p><b>American Association of Sex Educators, Counselors &amp; Therapists</b>  <a href="http://www.aasect.org">http://www.aasect.org</a>  319-895-8407</p> <ul style="list-style-type: none"> <li>• Fertility &amp; Sexuality</li> </ul> <p><b>American Brain Tumor Association</b>  <a href="http://www.abta.org">http://www.abta.org</a>  800-886-2282</p> <ul style="list-style-type: none"> <li>• Brain</li> </ul> <p><b>American Cancer Society (ACS)</b>  <a href="http://www.cancer.org">http://www.cancer.org</a>  800-ACS-2345 (227-2345)</p> <ul style="list-style-type: none"> <li>• General Resources</li> <li>• Insurance/Financial Assistance</li> </ul> <p><b>American Chronic Pain Association</b>  <a href="http://www.theacpa.org">http://www.theacpa.org</a>  916-632-0922</p> <ul style="list-style-type: none"> <li>• Pain Management</li> </ul> <p><b>American Pain Foundation</b>  <a href="http://www.painfoundation.org">http://www.painfoundation.org</a>  888-615-PAIN (7246)</p> <ul style="list-style-type: none"> <li>• Pain Management</li> </ul> <p><b>Association of Cancer Online Resources</b>  <a href="http://www.acor.org">http://www.acor.org</a>  212-226-5525</p> <ul style="list-style-type: none"> <li>• Cancer Information</li> <li>• On-line peer support</li> </ul> <p><b>Blood &amp; Marrow Transplant Information Network</b>  <a href="http://www.bmtnews.org">http://www.bmtnews.org</a>  888-597-7674</p> <ul style="list-style-type: none"> <li>• Bone Marrow Transplants</li> </ul> <p><b>The Brain Tumor Society</b>  <a href="http://www.tbts.org">http://www.tbts.org</a>  800-770-8287</p> <ul style="list-style-type: none"> <li>• Brain</li> </ul>	<p><b>Cancer Care, Inc.</b>  <a href="http://www.cancercares.org">http://www.cancercares.org</a>  800-813-HOPE (4673)</p> <ul style="list-style-type: none"> <li>• General Resources</li> <li>• Patient Support</li> </ul> <p><b>Cancer Hope Network</b>  <a href="http://www.cancerhopenetwork.org">http://www.cancerhopenetwork.org</a>  877-HOPENET (467-3638)</p> <ul style="list-style-type: none"> <li>• Patient Support</li> </ul> <p><b>Cancer Information Service</b>  (National Cancer Institute)  <a href="http://www.cancer.gov">http://www.cancer.gov</a>  800-4-CANCER (422-6897)</p> <ul style="list-style-type: none"> <li>• General Resources</li> </ul> <p><b>Cancer Research &amp; Prevention Foundation</b>  <a href="http://www.preventcancer.org">http://www.preventcancer.org</a>  800-227-CRFA (227-2732)</p> <ul style="list-style-type: none"> <li>• Prevention</li> <li>• Research</li> </ul> <p><b>Candlelighters Childhood Cancer Foundation</b>  <a href="http://www.candlelighters.org">http://www.candlelighters.org</a>  800-366-2223</p> <ul style="list-style-type: none"> <li>• Pediatric &amp; Young Adult</li> </ul> <p><b>Childhood Cancer Survivors: A Practical Guide to Your Future</b>  <a href="http://www.oreilly.com/catalog/chsurviv2/">http://www.oreilly.com/catalog/chsurviv2/</a></p> <ul style="list-style-type: none"> <li>• Guidebook to Survivorship Issues</li> </ul> <p><b>The Children's Cause</b>  <a href="http://www.childrenscause.org">http://www.childrenscause.org</a>  301-562-2765</p> <ul style="list-style-type: none"> <li>• Pediatric &amp; Young Adult</li> </ul> <p><b>Coalition of National Cancer Cooperative Groups</b>  <a href="http://www.cancertrialshelp.org">http://www.cancertrialshelp.org</a>  877-520-4457</p> <ul style="list-style-type: none"> <li>• Clinical Trials</li> </ul> <p><b>CureSearch</b>  <a href="http://www.curesearch.org">http://www.curesearch.org</a>  800-458-6223</p> <ul style="list-style-type: none"> <li>• Pediatric &amp; Young Adult</li> <li>• Cancer Information</li> <li>• Research/Clinical Trials</li> <li>• Survivorship Guidelines &amp; Information</li> </ul>
--	---

Table 8: Information and Resources for Survivors (continued)

<p><b>Employment Discrimination Advocacy</b>  <a href="http://www.washlaw.edu/subject/emp.html">http://www.washlaw.edu/subject/emp.html</a>  <ul style="list-style-type: none"> <li>• Employment Discrimination Resources</li> </ul> </p> <p><b>Family Caregiver Alliance (FCA)</b>  <a href="http://www.caregiver.org">http://www.caregiver.org</a>            800-445-8106  <ul style="list-style-type: none"> <li>• Caregiving/Family Support</li> </ul> </p> <p><b>Fertile Hope</b>  <a href="http://www.fertilehope.org">http://www.fertilehope.org</a>            888-994-HOPE  <ul style="list-style-type: none"> <li>• Fertility &amp; Sexuality</li> </ul> </p> <p><b>Genetic Alliance</b>  <a href="http://www.geneticalliance.org">http://www.geneticalliance.org</a>            202-966-5557  <ul style="list-style-type: none"> <li>• Genetic Discrimination</li> </ul> </p> <p><b>Gilda's Club Worldwide</b>  <a href="http://www.gildasclub.org">http://www.gildasclub.org</a>            888-GILDA-4-U  <ul style="list-style-type: none"> <li>• Patient Support</li> </ul> </p> <p><b>Group Loop</b>  <a href="http://www.grouploop.org">http://www.grouploop.org</a>  <ul style="list-style-type: none"> <li>• Teens with Cancer</li> </ul> </p> <p><b>Healthcare Transitions</b>  <a href="http://hctransitions.ichp.ufl.edu/resources.html">http://hctransitions.ichp.ufl.edu/resources.html</a>  <ul style="list-style-type: none"> <li>• Transition Resources</li> </ul> <a href="http://mchnetlinkplus.ichp.edu/training_materials.html">http://mchnetlinkplus.ichp.edu/training_materials.html</a>  <ul style="list-style-type: none"> <li>• Transition Training Materials</li> </ul> </p> <p><b>Health Links</b>  <a href="http://www.survivorshipguidelines.org">http://www.survivorshipguidelines.org</a>  <ul style="list-style-type: none"> <li>• Individual Survivorship Topics</li> </ul> </p> <p><b>i[2]y</b>  <a href="http://imtooyoungforthis.org">http://imtooyoungforthis.org</a>  <ul style="list-style-type: none"> <li>• Young Adults with Cancer</li> <li>• Blogs</li> </ul> </p> <p><b>Intercultural Cancer Council (ICC)</b>  <a href="http://www.icc.bcm.tmc.edu">http://www.icc.bcm.tmc.edu</a>            713-798-4617  <ul style="list-style-type: none"> <li>• Minority/Special Population</li> </ul> </p> <p><b>Kidney Cancer Association</b>  <a href="http://www.kidneycancerassociation.org">http://www.kidneycancerassociation.org</a>            800-850-9132  <ul style="list-style-type: none"> <li>• Kidney cancer</li> </ul> </p> <p><b>Lance Armstrong Foundation</b>  <a href="http://www.laf.org">http://www.laf.org</a>            512-236-8820  <ul style="list-style-type: none"> <li>• Education and Research</li> </ul> </p>	<p><b>Let's Face It</b>  <a href="http://www.faceit.org">http://www.faceit.org</a>            360-676-7325  <ul style="list-style-type: none"> <li>• Oral, Head and Neck</li> </ul> </p> <p><b>The Leukemia &amp; Lymphoma Society</b>  <a href="http://leukemia-lymphoma.org">http://leukemia-lymphoma.org</a>            800-955-4572  <ul style="list-style-type: none"> <li>• Leukemia &amp; Lymphoma</li> </ul> </p> <p><b>Lymphoma Research Foundation (LRF)</b>  <a href="http://www.lymphoma.org">http://www.lymphoma.org</a>            800-500-9976  <ul style="list-style-type: none"> <li>• Lymphoma</li> </ul> </p> <p><b>National Bone Marrow Transplant Link</b>  <a href="http://www.nbmtlink.org">http://www.nbmtlink.org</a>            800-LINK-BMT (546-5268)  <ul style="list-style-type: none"> <li>• Bone Marrow Transplants</li> </ul> </p> <p><b>National Brain Tumor Foundation</b>  <a href="http://www.braintumor.org">http://www.braintumor.org</a>            800-934-CURE (2873)  <ul style="list-style-type: none"> <li>• Brain</li> </ul> </p> <p><b>National Cancer Institute (NCI)</b>  <a href="http://www.cancer.gov">http://www.cancer.gov</a>            800-4-CANCER (422-6897)  <ul style="list-style-type: none"> <li>• Research &amp; Information</li> <li>• Clinical Trials</li> </ul> </p> <p><b>National Children's Cancer Society</b>  <a href="http://www.beyondthecure.org">http://www.beyondthecure.org</a>            314-241-1600  <ul style="list-style-type: none"> <li>• Support of local late effects programs</li> <li>• Educational programs for families</li> </ul> </p> <p><b>National Coalition for Cancer Survivorship</b>  <a href="http://www.canceradvocacy.org">http://www.canceradvocacy.org</a>            877-NCCS-YES (622-7937)  <ul style="list-style-type: none"> <li>• General &amp; Online Resources</li> <li>• Programs &amp; Publications</li> </ul> </p> <p><b>Planet Cancer</b>  <a href="http://www.planetcancer.org">http://www.planetcancer.org</a>  <ul style="list-style-type: none"> <li>• Young Adults with Cancer</li> <li>• On &amp; Off Treatment Issues</li> </ul> </p> <p><b>Special Education Advocacy</b>  <a href="http://www.wrightslaw.com">http://www.wrightslaw.com</a>  <ul style="list-style-type: none"> <li>• Special Education Laws</li> <li>• Advocacy for Children with Disabilities</li> </ul> </p>
--	---

## EDUCATIONAL ISSUES

**C**ancer treatment and late-effects can have a negative impact on the survivor's education.<sup>39</sup> Treatment may have caused the child to miss an inordinate amount of school, resulting in difficulty returning to school, missed assignments and tests, and missed opportunities to grasp facts and concepts. When patients return to school, treatment-related fatigue, frequent absences for scheduled treatments or for unscheduled treatment-related complications, and difficulties with fine and gross motor skills resulting from cancer treatment all set them apart physically and socially from their classmates. Many survivors fall behind their peers academically.

### Educational Assessment and Planning

One of the most serious effects related to treatment involving the central nervous system in childhood cancer survivors is cognitive impairment. Learning difficulties, social difficulties, behavioral adjustment problems, and long-term educational and vocational difficulties may occur.<sup>5</sup> The signs of possible learning difficulties may include problems with:

- Handwriting
- Spelling
- Reading and comprehension
- Understanding math facts and concepts
- Difficulty in sequencing
- Auditory or visual processing
- Attention deficits
- Short-term memory and information retrieval
- Planning and organizational skills
- Social maturity and social skills

Neuropsychological testing is done routinely for children with certain cancers, such as brain tumors, or for children requiring cranial radiation or intrathecal chemotherapy. However, all patients should be monitored for difficulties such as those outlined above,

and offered psychological testing to target any learning disabilities.

Neuropsychological assessment of the patient may begin with a referral from the oncology department to the pediatric psychologist, or through a referral from the survivor's school psychologist. Based on the results of these tests, the survivor may be eligible for supportive educational programs such as tutoring, remedial classes for certain difficult subjects, and Individualized Educational and/or Transition Plans (IEPs/ITPs) that are tailored to meet the survivor's specific academic needs.

### Educational Interventions

Examples of classroom strategies that may be helpful for survivors with educational problems related to their treatments include:

- Preferential seating in classroom
- Minimizing the amount of written work required
- Use of tape-recorders
- Use of computer keyboards instead of handwriting
- Use of calculators for math
- Modification of test requirements (extra time, oral instead of written exams)
- Extra help with math, spelling, reading, and organizational skills
- Assignment of a classroom aide

Parents may wish to enlist the help of a private tutor or consider home-schooling if they feel their child's needs are not being adequately met; however, this may not be financially feasible for many families.

*"The school worked with us to help John in school, especially in reading and math, but they admitted they didn't have the staff or resources to make an impact on his special learning needs. We finally decided to home-school him so that we could focus on his problem areas."*

*- Sharon  
Mother of 7-year-old ALL patient*

### Legal Issues

Some of the laws in the United States that protect the rights of students with learning disabilities related to cancer treatment include:

#### **Rehabilitation Act of 1973 – Section 504**

This legislation mandates that every public school and every educational institution in the United States receiving federal funding (including colleges and universities) must provide accommodations for students with a physical or mental impairment which substantially limits one or more major life activities. Cancer is one of the qualifying conditions for services. Additional conditions include hearing problems, vision problems, learning disabilities, speech disorders, and orthopedic limitations. Detailed information regarding Section 504 is available at <http://www.hhs.gov/ocr/504.html>.

#### **The Individuals with Disabilities Education Act of 2004 (IDEA 2004)**

The major provisions of this law insure a free and appropriate education in the least restrictive environment to all students with a physical or mental impairment which substantially limits one or more life activities. A student with the qualifying condition of cancer is eligible for the following services free of charge:

- Special education programs
- Speech therapy
- Occupational and physical therapy
- Psychiatric services
- Alternative communication techniques and technology, such as oral tests or the use of a computer for taking notes
- And other interventions or exemptions from rules and policies as needed to help the child learn

Under this act, a student can qualify for special education services by initiating an Individualized Education Plan, or IEP, through their school. Once an IEP is requested, the child will be evaluated and tested by a school psychologist to determine if services are required. Following this assessment, teachers and parents meet to discuss the testing results and develop the student's individualized plan. If parents disagree with the IEP, feel that the IEP is inadequate, or that it is not being followed correctly, they can withdraw consent and ask that a new IEP be drafted, or request a review by an independent hearing officer. Additional information about the IDEA law is available at <http://idea.ed.gov> and from the National Information Center for Children and Youth with Disabilities (phone: 1-800-695-0285; website [www.nichcy.org](http://www.nichcy.org)).

#### **Americans with Disabilities Act of 1990**

The ADA law protects against discrimination of disabled people with regard to employment, transportation, communication, and access to public facilities, spaces, events and opportunities. It is important for survivors with disabilities, or their caregivers, to have adequate knowledge of this act as it pertains to school, higher education (Student Disability Services), and potential employment. This information is available at [www.ada.gov](http://www.ada.gov).

#### **Special Education Advocacy**

The field of special education is complex, and navigating the educational system can be challenging. A wealth of information and assistance with special education issues is available at advocacy-oriented websites such as [www.wrightslaw.com](http://www.wrightslaw.com).



## EMPLOYMENT ISSUES

**C**ancer affects a person on a physical, emotional, and psychological level. In some survivors, the effects of treatment are minimal, but in others, the effects can be disabling. As a childhood cancer survivor enters the period in their life when employment becomes a practical matter, the type of job or career they choose may be influenced by physical, emotional, and psychological response to treatment.<sup>40</sup>

Perhaps the survivor has a physical disability that makes it difficult to work in a job that is physically taxing, involving activities such as lifting, walking, balancing, or seeing clearly. Perhaps a survivor has had to deal with emotional issues that might preclude employment that involve activities such as meeting new people, being in a crowd, or being self-motivated, or that may arouse feelings of stress, depression, or anger. A survivor may have psychological or cognitive issues as a result of treatment that would make it difficult to work with numbers and letters, organize ideas, or remember details and recall them later. For some survivors, these issues will not affect their career choices, but for those who live with significant late effects from cancer treatment which have an impact on career options, support services are available.

### Vocational/Career Choice Considerations

Vocational education prepares learners for careers that are traditionally non-academic, based on manual or practical activities, and directly related to a specific trade, occupation, or vocation. Vocational education is sometimes also referred to as "technical education," because the learner develops expertise in a particular group of techniques or technology. Vocational education generally focuses on specific trades such as an automobile mechanic, welder, plumber, electrician, or nurses' aide.

At the post-secondary level, vocational education is typically provided by an institute of technology or by a local community college.

School-to-work transition refers to on-the-job training, apprenticeships, cooperative education agreements or other programs designed to prepare students to enter the job market. These programs expose middle and high school students to potential future careers.

Rehabilitation services programs assist individuals with disabilities to achieve employment and self-sufficiency. Training programs may include:

- Automotive technology
- Business support services
- Millwork
- Culinary arts
- Custodial
- Grounds maintenance/landscaping
- Machine technology
- Nurse assistant
- Retail

Support services offered often include:

- Career assessment/planning
- Reading and math remediation
- High school completion
- Nursing and psychiatric services
- Occupational therapy
- Accommodation services
- Job placement services

In the United States, qualification requirements for rehabilitation and vocational training vary by state. For further information, contact the Department of Education or Office of Vocational and Adult Education in your state, or visit [www.ed.gov](http://www.ed.gov).

### Legal Issues Related to Employment

While medical care is essential for childhood cancer survivors, it is just as important for them to return to their "normal" life as soon as possible, especially with regard to

employment or searching for employment. Unfortunately, cancer survivors are sometimes treated unfairly due to preconceived ideas about cancer that may lead employers to make inaccurate assumptions about a cancer survivor's ability to work. It is important for employers to understand issues facing workers with a history of cancer. In order to counteract the possibility of workplace discrimination, survivors must promote a new understanding of their ability to contribute to the workforce. The key to this new understanding is education and communication with potential employers.

**Employment discrimination laws.** In the United States, the Americans with Disabilities Act (ADA) and Federal Rehabilitation Act prohibit certain types of job discrimination by employers against people who have had cancer. Under federal law and in many state laws, an employer with 15 or more employees cannot treat cancer survivors differently from other workers because of a cancer history, as long as the survivor is qualified for the job in question.

A prospective employer may not ask about health history during an interview unless there is a visible disability that the employer believes may affect the potential employee's ability to perform the job. This law also requires an employer to provide "reasonable accommodations" for employees during or following cancer treatments. This may include time off or changes in work hours. However, an employer does not have to make changes that would cause the company an "undue hardship." For example, if an employee had to take time away from work that would prove costly or disruptive to the operation of the business, the employer may replace the employee. It is therefore always important for the employee to speak with a supervisor to

discuss alternatives to missed work days or potential solutions to any problems the employee may be having in performing assigned job duties.

**Family Medical Leave Act.** The Family Medical Leave Act (FMLA) requires employers with 50 or more employees to provide up to 12 weeks of unpaid, job-protected leave for family members who need time off due to their own illness or to care for a seriously ill family member. The employee must have been employed for one year and must have worked for at least 25 hours per week. Some provisions under the act are:

- Provides 12 weeks of unpaid leave during any 12 month period
- Requires employers to continue to provide health insurance benefits during the leave period
- Requires employers to restore employees to the same or an equivalent position at the end of the leave period
- Allows intermittent or reduced work schedule when medically necessary
- Requires employees to make reasonable efforts to schedule foreseeable medical care so as not to disrupt the workplace unduly

**Federal Equal Employment Opportunity (EEO) Laws.** Federal laws in the United States prohibiting job discrimination are:

**Equal Pay Act of 1963 (EPA):**

Protects men and women who perform substantially equal work in the same establishment from sex-based wage discrimination

**Civil Rights Act of 1964 (Title VII):**

Prohibits employment discrimination based on race, color, religion, sex, or national origin

**Age Discrimination in Employment Act of 1967 (ADEA):** Protects individuals who are 40 years of age or older

**Rehabilitation Act of 1973, Sections 501 and 505:** Prohibits discrimination against qualified individuals with disabilities who work in the federal government

**Americans with Disabilities Act (ADA) of 1990, Titles I and V:** Prohibits employment discrimination against qualified individuals with disabilities in the private sector, and in state and local governments

**Civil Rights Act of 1991:**

Provides monetary damages in cases of intentional employment discrimination

The U.S. Equal Employment Opportunity Commission (EEOC) enforces all of these laws. EEOC also provides oversight and coordination of all federal equal employment opportunity regulations, practices, and policies. Additional information regarding employment discrimination, including links to websites, resources and listservs is available on the Washburn Law website at <http://www.washlaw.edu/subject/emp.html>.



## INSURANCE ISSUES

**H**ealth insurance coverage is an important issue for everyone, but it is particularly important for cancer survivors due to their unique needs for follow-up care related to their treatment.<sup>40</sup> There are many types of policies available to the public, although not all offer the same coverage.

### Obtaining Insurance

**Private insurance.** Most people who obtain insurance through their employer have what is called private comprehensive health coverage. This type of coverage generally pays for all basic healthcare needs, such as hospital and physician care, tests, medical equipment, supplies, and prescription drug coverage. The most common types of private insurance plans are the indemnity or "fee-for-service" plan, the managed care or "HMO" plan, the preferred provider organization or "PPO" plan and the point-of-service or "POS" plan. The defining differences in these policies are the amount of money the individual is required to pay in the form of premiums, deductibles and co-payments, and the choice of medical providers and hospitals to which the patient has access.

**Public insurance coverage.** Instead of private insurance, some people are eligible for health insurance through the government. Qualifications are based on age, income, health status and/or disability. Medicare and Medicaid are the largest public programs in the United States and are available in every state.

**Medicare.** Medicare is provided by the United States government. Survivors may qualify for Medicare for a variety of reasons, such as disability (regardless of age) or collection of Social Security benefits for 2 years. Further information is available at [www.medicare.gov/MedicareEligibility](http://www.medicare.gov/MedicareEligibility).

**Medicaid.** Medicaid is also a United States government program that provides health insurance to those with limited incomes. Additional qualification requirements for Medicaid vary by state and may include age, disability, pregnancy, or having a dependent child. Some types of cancer and/or cancer treatment are considered disabilities. Additional information regarding Medicaid eligibility criteria is available at [www.cms.hhs.gov/MedicaidEligibility](http://www.cms.hhs.gov/MedicaidEligibility).

**State Children's Health Insurance Program (S-CHIP).** Health insurance for low-income, uninsured children under the ages of 19 or 21 (depending on the state) is available through the State Children's Health Insurance Program (S-CHIP). Generally, this is a form of public insurance associated with the Medicaid program in each state. Further information is available at [www.cms.hhs.gov/schip](http://www.cms.hhs.gov/schip).

**Preventing loss of insurance coverage.** If survivors find themselves in a situation where they are about to lose their health insurance coverage (either private or public), it is imperative for them to obtain alternate insurance prior to the end of their current policy coverage. It can often be very difficult to obtain insurance after a lapse in policies. Medical Social Workers or Patient Billing Representatives are often helpful in providing assistance for survivors in this situation.

**Supplemental Security Income (SSI).** The Supplemental Security Income (SSI) program provides coverage (such as insurance and financial assistance) to individuals with disabilities who qualify for federal disability benefits in the United States.<sup>41</sup> Eligible children must have evidence of severe functional limitations

related to a condition that is expected to last at least 12 months. Cancer and its treatment are often qualifying events for this program. A Medical Social Worker can often assist survivors in accessing SSI information. Additional information is available through the Social Security Administration ([www.ssa.gov/d&s1](http://www.ssa.gov/d&s1)).

### Legal Issues

#### Barriers to obtaining insurance coverage.

It is not uncommon for cancer survivors to encounter barriers to obtaining health insurance coverage, including refusal of new applications, policy cancellation or reduction, higher premiums, excluded pre-existing conditions, and extended waiting periods.<sup>36</sup> Among survivors of childhood cancer, problems obtaining health insurance may be compounded because most survivors have been insured under family-related policies prior to their cancer diagnosis.<sup>40</sup>

Adolescents and young adults may be especially vulnerable to insurance problems as they “age out” of coverage from their parents’ policies or from public insurance, because they may also encounter other common barriers facing young adults, such as not having an employer that offers health insurance benefits, and the prohibitive costs of individual private insurance. For those survivors who do obtain or retain insurance, there may be difficulties in obtaining reimbursement for costs associated with screening intended to prevent or reduce the impact of cancer-related late effects, because these tests are often not included as benefits offered by health insurance plans.

**Insurance-related laws:** In the United States, three federal laws provide some protection for survivors related to health insurance obtained from employment:

- **Americans with Disabilities Act** (ADA 42 U.S.C. 12101 et seq.): Prohibits employers from denying health insurance to cancer survivors if other employees with similar jobs receive insurance
- **Health Insurance Portability and Accountability Act (HIPAA):** Helps cancer survivors retain their health insurance by:
  - Allowing individuals who have been insured for the previous 12 months to change jobs without losing coverage
  - Preventing group health plans from denying coverage based on past or current health status
  - Ensuring portability of insurance for those changing from group to individual insurance coverage
  - Requiring that health plans renew coverage for groups and individuals in most cases
- **The Consolidated Omnibus Budget Reconciliation Act (COBRA PL 99272):** Requires employers to offer group medical coverage to employees and their dependents who otherwise would have lost their group coverage due to individual circumstances. This law applies to public and private employers with 20 or more employees. By allowing survivors to keep group insurance for a limited time, COBRA allows time for the survivor to search for and obtain alternative long-term coverage.

Cancer survivors who are having trouble getting insurance authorization for follow-up care may need the LTFU clinic staff to provide letters justifying the rationale for these services. Survivors who are having difficulty obtaining or maintaining insurance coverage should contact the Medical Social Work Department at their institution for assistance.

## REFERENCES

1. Meadows AT, D'Angio GJ. Late effects of cancer treatment: methods and techniques for detection. *Semin Oncol*. Mar 1974;1(1):87-90.
2. Fergusson JH. Late psychologic effects of a serious illness in childhood. *Nurs Clin North Am*. Mar 1976;11(1):83-93.
3. Robison LL. Personal communication to K. Ruccione. July 5, 2007.
4. Fergusson J, Ruccione K, Waskerwitz M, et al. Time required to assess children for the late effects of treatment. A report from the Childrens Cancer Study Group. *Cancer Nurs*. Dec 1987;10(6):300-310.
5. Hewitt ME, Weiner SL, Simone JV, eds. *Childhood cancer survivorship: improving care and quality of life*. Washington, DC: The National Academies Press; 2003.
6. Oeffinger KC. Longitudinal risk-based health care for adult survivors of childhood cancer. *Curr Probl Cancer*. May-Jun 2003;27(3):143-167.
7. Rosoff PM. The two-edged sword of curing childhood cancer. *N Engl J Med*. Oct 12 2006;355(15):1522-1523.
8. Oeffinger KC, Mertens AC, Sklar CA, et al. Chronic health conditions in adult survivors of childhood cancer. *N Engl J Med*. Oct 12 2006;355(15):1572-1582.
9. Kadan-Lottick NS, Robison LL, Gurney JG, et al. Childhood cancer survivors' knowledge about their past diagnosis and treatment: Childhood Cancer Survivor Study. *JAMA*. Apr 10 2002;287(14):1832-1839.
10. Oeffinger KC, Mertens AC, Hudson MM, et al. Health care of young adult survivors of childhood cancer: a report from the Childhood Cancer Survivor Study. *Ann Fam Med*. Jan-Feb 2004;2(1):61-70.
11. Landier W, Bhatia S, Eshelman DA, et al. Development of risk-based guidelines for pediatric cancer survivors: the Children's Oncology Group Long-Term Follow-Up Guidelines from the Children's Oncology Group Late Effects Committee and Nursing Discipline. *J Clin Oncol*. Dec 15 2004;22(24):4979-4990.
12. Bhatia S, Meadows AT. Long-term follow-up of childhood cancer survivors: future directions for clinical care and research. *Pediatr Blood Cancer*. Feb 2006;46(2):143-148.
13. Eiser C, Absolom K, Greenfield D, et al. Follow-up after childhood cancer: evaluation of a three-level model. *Eur J Cancer*. Dec 2006;42(18):3186-3190.
14. Friedman DL, Freyer DR, Levitt GA. Models of care for survivors of childhood cancer. *Pediatr Blood Cancer*. Feb 2006;46(2):159-168.
15. Aziz NM, Rowland JH. Trends and advances in cancer survivorship research: challenge and opportunity. *Semin Radiat Oncol*. Jul 2003;13(3):248-266.
16. Landier W, Wallace WH, Hudson MM. Long-term follow-up of pediatric cancer survivors: education, surveillance, and screening. *Pediatr Blood Cancer*. Feb 2006;46(2):149-158.
17. Zebrack BJ, Eshelman DA, Hudson MM, et al. Health care for childhood cancer survivors: insights and perspectives from a Delphi panel of young adult survivors of childhood cancer. *Cancer*. Feb 15 2004;100(4):843-850.
18. Oeffinger KC, Wallace WH. Barriers to follow-up care of survivors in the United States and the United Kingdom. *Pediatr Blood Cancer*. Feb 2006;46(2):135-142.
19. Mertens AC, Cotter KL, Foster BM, et al. Improving health care for adult survivors of childhood cancer: recommendations from a delphi panel of health policy experts. *Health Policy*. Aug 2004;69(2):169-178.
20. Hudson MM, Hester A, Sweeney T, et al. A model of care for childhood cancer survivors that facilitates research. *J Pediatr Oncol Nurs*. May-Jun 2004;21(3):170-174.
21. Skinner R, Wallace WH, Levitt GA. Long-term follow-up of people who have survived cancer during childhood. *Lancet Oncol*. Jun 2006;7(6):489-498.

22. Hobbie WL. The role of the pediatric oncology nurse specialist in a follow-up clinic for long-term survivors of childhood cancer. *J Assoc Pediatr Oncol Nurses*. 1986;3(4):9-12, 24.
23. Betz CL. Adolescent transitions: a nursing concern. *Pediatr Nurs*. Jan-Feb 1998;24(1):23-28; quiz 29-30.
24. Betz CL. Facilitating the transition of adolescents with chronic conditions from pediatric to adult health care and community settings. *Issues Compr Pediatr Nurs*. Apr-Jun 1998;21(2):97-115.
25. Lindeke LL, Krajicek M, Patterson DL. PNP roles and interventions with children with special needs and their families. *J Pediatr Health Care*. May-Jun 2001;15(3):138-143.
26. *National Association of Pediatric Nurse Practitioners, Position Statement on Age Parameters for Pediatric Nurse Practitioner Practice*. Cherry Hill, NJ 2002.
27. Meadows AT. Pediatric cancer survivorship: research and clinical care. *J Clin Oncol*. Nov 10 2006;24(32):5160-5165.
28. Dow KH. Seventh National Conference on Cancer Nursing Research keynote address: challenges and opportunities in cancer survivorship research. *Oncol Nurs Forum*. May-Jun 2003;30(3):455-469.
29. Meadows AT, Varricchio C, Crosson K, et al. Research issues in cancer survivorship: report of a workshop sponsored by the Office of Cancer Survivorship, National Cancer Institute. *Cancer Epidemiol Biomarkers Prev*. Dec 1998;7(12):1145-1151.
30. Vaughn DJ, Meadows AT. Cancer survivorship research: the best is yet to come. *J Clin Oncol*. Feb 15 2002;20(4):888-890.
31. Mertens AC, Yasui Y. Methodological and statistical issues in the study of late effects of childhood cancer. In: Schwartz CL, Hobbie WL, Constine LS, Ruccione KS, eds. *Survivors of childhood and adolescent cancer*. 2nd ed. New York: Springer; 2004:321-330.
32. Severson RK, Robison LL. Methodological and statistical issues in the study of late effects of childhood cancer. In: Schwartz CL, Hobbie WL, Constine LS, Ruccione KS, eds. *Survivors of childhood cancer: assessment and management*. St. Louis: Mosby; 1994:354-365.
33. Burns N, Groves SK, eds. *The practice of nursing research: conduct, critique, and utilization*. 5 ed. St. Louis: Elsevier; 2005.
34. Liamputtong P, Ezzy D, eds. *Qualitative research methods*. 2 ed. New York: Oxford University Press; 2005.
35. Whittemore R, Grey M. The systematic development of nursing interventions. *J Nurs Scholarsh*. 2002;34(2):115-120.
36. Hewitt ME, Greenfield S, Stovall E, eds. *From cancer patient to cancer survivor: lost in transition*. Washington, D.C.: The National Academies Press; 2006.
37. Hoffman B. *A cancer survivor's almanac: charting your journey*. Minneapolis, MN: Chronimed Publishing; 1996.
38. Clark EJ. *You have the right to be hopeful*. 3 ed. Silver Spring, MD: National Coalition for Cancer Survivorship; 2004.
39. Keene N. *Childhood leukemia: a guide for families, friends, and caregivers*. 3 ed. Sebastopol, CA: O'Reilly & Associates; 2002.
40. Hays DM. Adult survivors of childhood cancer. Employment and insurance issues in different age groups. *Cancer*. May 15 1993;71(10 Suppl):3306-3309.
41. Wunderlich GS, Rice DP, Amado NL, eds. *The dynamics of disability: measuring and monitoring disability for social security programs*. Washington, D.C.: The National Academies Press; 2002.

## APPENDIX 1: COG Resources

- **Sample Section from  
*COG Long-Term Follow-Up Guidelines***
- **Sample COG *Health Link***
- **COG Treatment Summary Templates:**
  - **Abbreviated**
  - **Comprehensive**
- **Late Effects Web Forum**
- **Late Effects Directory of Services**



## RESOURCES AVAILABLE FROM COG

### [Long-Term Follow-Up Guidelines](#)

The Children's Oncology Group's *Long-Term Follow-Up Guidelines for Survivors of Childhood, Adolescent, and Young Adult Cancers*, with instructions for use, are available at [www-survivorshipguidelines.org](http://www-survivorshipguidelines.org) (click on "Long-Term Follow-Up Guidelines") [see Figure 2].

The *LTFU Guidelines* and accompanying materials are updated periodically by the COG Late Effects Task Forces; therefore, it is advisable to check the website periodically for updates.

### [Summary Form Templates](#)

Templates and instructions for creating Cancer Treatment Summary Forms (in abbreviated and comprehensive formats) are available by clicking on "Appendix I" at [www-survivorshipguidelines.org](http://www-survivorshipguidelines.org) [see Figure 2].

### [Health Links](#)

Patient education materials, known as "Health Links," expand upon topics from the *Long-Term Follow-Up Guidelines* in lay language format. All 42 "Health Links" are available by clicking on "Appendix 2" at [www-survivorshipguidelines.org](http://www-survivorshipguidelines.org) [see Figure 2].

**Figure 2: COG Long-Term Follow-Up Guidelines Website**  
[www-survivorshipguidelines.org](http://www-survivorshipguidelines.org)

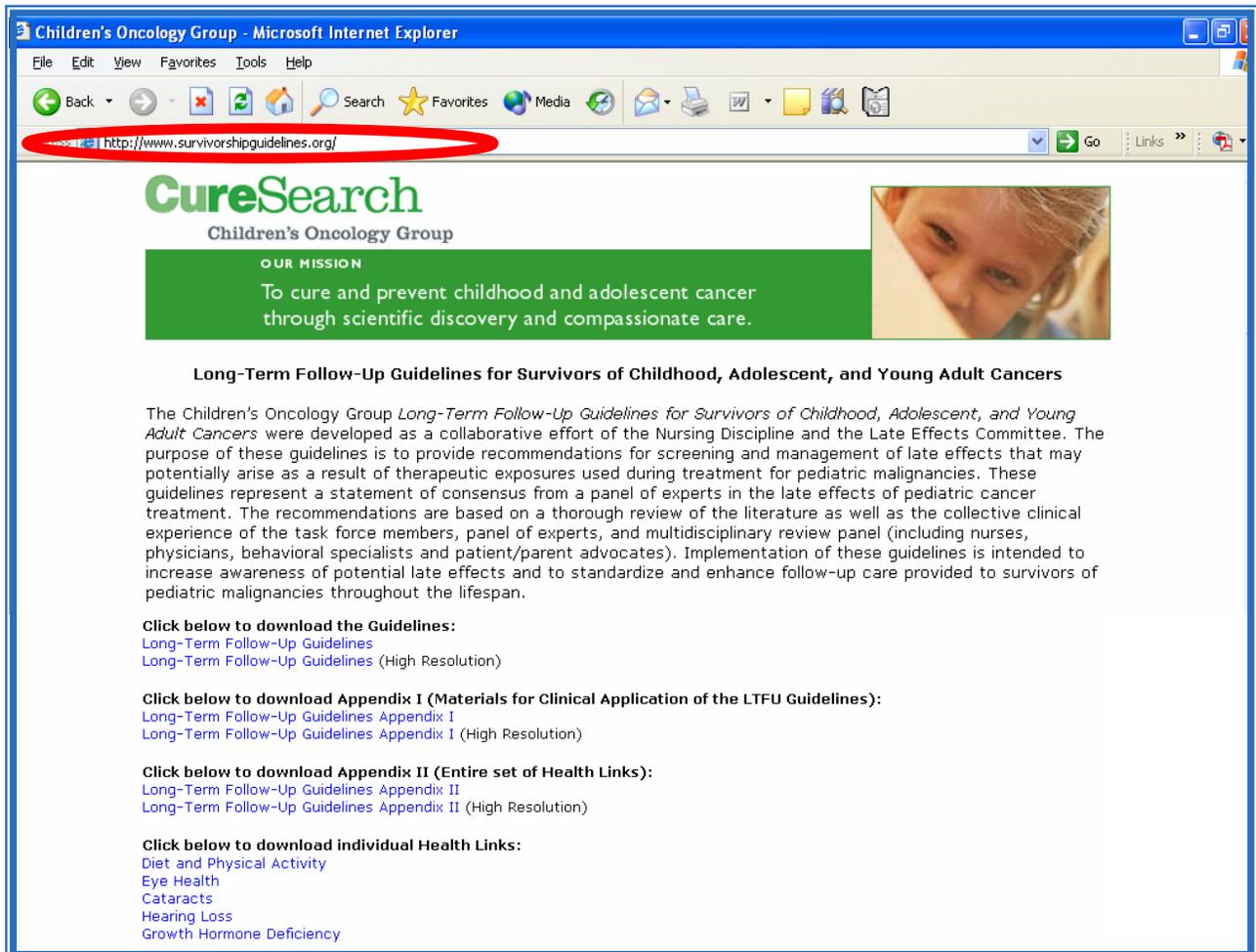


Figure 3: Sample page from COG Long-Term Follow-Up Guidelines  
 (Entire set of COG LTFU Guidelines is available at [www.survivorshipguidelines.org](http://www.survivorshipguidelines.org))

CHEMOTHERAPY		CORTICOSTEROIDS (cont)				
Sec #	Therapeutic Agent(s)	Potential Late Effects	Risk Factors	Highest Risk Factors	Periodic Evaluation	Health Counseling Further Considerations
33	CORTICOSTEROIDS Dexamethasone Prednisone	Cataracts	Treatment Factors Combined with: - TBI - Busulfan	Treatment Factors TBI Cranial, orbital, or eye radiation Longer interval since treatment	<b>HISTORY</b> Visual difficulties (Yearly)  <b>PHYSICAL</b> Eye exam (visual acuity, funduscopic exam for lens opacity) (Yearly)	<b>Health Links</b> Cataracts  <b>Considerations for Further Testing and Intervention</b> Ophthalmology consultation if problem identified. Refer patients with visual deficits to school liaison in community or cancer center (psychologist, social worker, school counselor) to facilitate acquisition of educational resources.  <b>SYSTEM = Ocular</b> <b>SCORE = 1</b>
<b>SECTION 33 REFERENCES</b>						
Benyunes MC, Sullivan KM, Deeg HJ, et al. Cataracts after bone marrow transplantation: long-term follow-up of adults treated with fractionated total body irradiation. <i>Int J Radiat Oncol Biol Phys</i> . Jun 15 1995;32(3):661-670. Hoover DL, Smith LE, Turner SJ, Gelber RD, Sallan SE. Ophthalmic evaluation of survivors of acute lymphoblastic leukemia. <i>Ophthalmology</i> . Feb 1988;95(2):151-155. Kaye LD, Kalenak JW, Price RL, Cunningham R. Ocular implications of long-term prednisone therapy in children. <i>J Pediatr Ophthalmol Strabismus</i> . May-Jun 1993;30(3):142-144. Pakisch B, Langmann G, Langmann A, et al. Ocular sequelae of multimodal therapy of hematologic malignancies in children. <i>Med Pediatr Oncol</i> . 1994;23(4):344-349.2001;19(12):3066-3072.						

Figure 4: Sample page from COG Health Link  
 (Entire set of Health Links is available at [www.survivorshipguidelines.org](http://www.survivorshipguidelines.org))

# Health Link

*Healthy living after treatment for childhood cancer*

Cataracts  
Version 2.0 - 3/06

## Cataracts after Treatment for Childhood Cancer

Childhood cancer treatment sometimes requires the use of medications or radiation that can increase the risk of developing cataracts. Because vision can have a significant impact on daily living, it is important for survivors who received these treatments to have their eyes checked regularly.

**What is a cataract?**

A cataract is clouding of the normally clear lens of the eye. Cataracts often develop slowly, but as the clouding increases, vision can be affected.

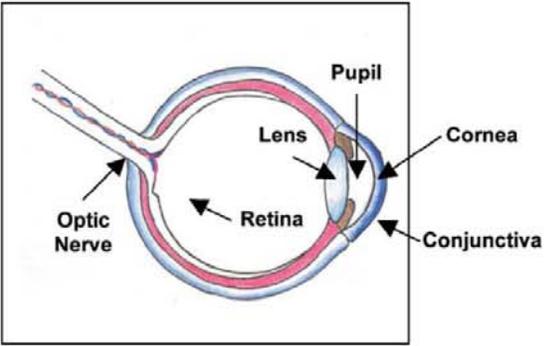
**How does a cataract affect vision?**

The eyes are remarkable organs, allowing light to be converted into impulses that are transmitted to the brain, where images are perceived. Light enters the eye through a clear layer of tissue known as the **cornea**. The cornea bends and focuses the light, and sends it through the opening of the eye known as the **pupil**. The pupil controls how much light enters the eye. Behind the pupil is the **lens** of the eye, which focuses the light onto the **retina**, the membrane along the back wall of the eye. The nerve cells in the retina change the light into electrical impulses and send them through the **optic nerve** to the brain, where the image is perceived. When the **lens becomes cloudy due to a cataract**, the image delivered to the retina becomes blurry.

**What are the symptoms of a cataract?**

Common symptoms of cataracts include:

- Painless blurring of vision
- Sensitivity to light and glare
- Double vision in one eye
- Poor night vision
- Fading or yellowing of colors
- The need for frequent changes in prescriptions for glasses or contact lenses



**What cancer therapies increase the risk of developing cataracts?**

- Certain medications, including:
  - **Busulfan**
  - **Corticosteroids**, such as prednisone and dexamethasone



Children's Oncology Group

Copyright 2006 © Children's Oncology Group  
All rights reserved worldwide

Page 1 of 3

Figure 5: Abbreviated treatment summary  
(Summary form and instructions are available at [www.survivorshipguidelines.org](http://www.survivorshipguidelines.org))

SUMMARY OF CANCER TREATMENT (Abbreviated)		
<b>DEMOGRAPHICS</b>		
Name:	Sex:	Date of Birth:
<b>CANCER DIAGNOSIS</b>		
Diagnosis:	Date of Diagnosis:	Date Therapy Completed:
<b>CHEMOTHERAPY:</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes, complete chart below</i>		
Drug Name	Additional Information <sup>†</sup>	
<sup>†</sup> <b>Anthracyclines:</b> Include cumulative dose in mg/m <sup>2</sup> and age at first dose (see section 28 of Guidelines for isotoxic dose conversion); <b>Carboplatin:</b> Indicate if dose was myeloablative; <b>Methotrexate and Cytarabine:</b> Indicate route of administration (i.e., IV, IM, SQ, PO, IT, IO); <b>IV Methotrexate and Cytarabine:</b> Indicate if "high dose" (any single dose ≥1000 mg/m <sup>2</sup> ) or "standard dose" (all single doses <1000 mg/m <sup>2</sup> ) <b>Note:</b> Cumulative doses, if known, should be recorded for all agents, particularly for alkylators and bleomycin.		
<b>RADIATION</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes, complete chart below</i>		
Site/Field*	Total Dose** (Gy)***	
* For chest, thoracic spine, and upper abdominal radiation, include age at first dose    ** Total dose to each field should include boost dose, if given *** Note: To convert cGy or rads to Gy, divide dose by 100 (example: 2400 cGy = 2400 rads = 24 Gy)		
<b>HEMATOPOIETIC CELL TRANSPLANT</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes, answer question below</i>		
Was this patient ever diagnosed with <b>chronic</b> graft-versus-host disease (cGVHD)? <input type="checkbox"/> Yes <input type="checkbox"/> No		
<b>SURGERY</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes, complete chart below</i>		
Procedure	Site (if applicable)	Laterality (if applicable)
<b>OTHER THERAPEUTIC MODALITIES</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes, answer questions below</i>		
Did this patient receive radioiodine therapy (I-131 thyroid ablation)?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Did this patient receive systemic MIBG (in therapeutic doses)?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Did this patient receive bioimmunotherapy?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<b>Summary prepared by:</b>		<b>Date prepared:</b>



Figure 6: Comprehensive treatment summary (page 2)  
 (Summary form, instructions, and key for completion available at [www.survivorshipguidelines.org](http://www.survivorshipguidelines.org))

RADIATION <input type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes, complete chart below</i>										
Site/Field	Laterality	Start Date	Stop Date	Fractions	Dose per Fraction (Gy)*	Initial Dose (Gy)*	Boost Site	Boost Dose (Gy)*	Total Dose (including boost) (Gy)*	Type
(see list #8)							(see list #9)			(see list #10)
Radiation oncologist:						Institution:				
*Note: To convert cGy or rads to Gy, divide dose by 100 (example: 2400 cGy = 2400 rads = 24 Gy)										
HEMATOPOIETIC CELL TRANSPLANT <input type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes, complete chart below</i>										
Type	Source		Date of Infusion	Conditioning Regimen		Institution/Treating MD				
(see list #11)	(see list #12)			(see list #13)						
Tandem? <input type="checkbox"/> Yes <input type="checkbox"/> No										
GVHD prophylaxis/treatment (For transplant patients only) <input type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes, complete chart below</i>										
Type			First Dose			Last Dose				
(see list #14)										
Was this patient ever diagnosed with <b>chronic</b> graft-versus-host disease (cGVHD)? <input type="checkbox"/> Yes <input type="checkbox"/> No										
SURGERY <input type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes, complete chart below</i>										
Date	Procedure		Site (if applicable)	Laterality (if applicable)		Surgeon/Institution				
	(see list #15)									
OTHER THERAPEUTIC MODALITIES <input type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes, complete chart below</i>										
Therapy			Route		Cumulative Dose (if known)					
(see list # 16)			(see list #6)		(see list #7)					
COMPLICATIONS/LATE EFFECTS <input type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes, complete chart below</i>										
Problem		Date onset		Date resolved		Status				
(see list #17)						(Active/Resolved)				
						(Active/Resolved)				
						(Active/Resolved)				
						(Active/Resolved)				
						(Active/Resolved)				
Adverse Drug Reactions/Allergies <input type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes, complete chart below</i>										
Drug		Reaction			Date		Status			
							(Active/Resolved)			
							(Active/Resolved)			
Additional Information/Comments <input type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes, provide information below</i>										
Summary prepared by: (name/title/institution)						Date prepared:				
Summary updated by: (name/title/institution)						Date updated:				

### Late Effects Web Forum

The Late Effects Web Forum is an on-line discussion board where COG members can post and reply to questions regarding issues relating to late effects and long-term follow-up. Questions and replies remain accessible from the website as a resource for those seeking similar information. To reach the Late Effects Web Forum from the

COG member home page, click on "Committees", then "Discipline", then "Nursing", and then click on "Late Effects Web Forum" from the menu on the left side of the page. Detailed instructions are provided below. Current COG membership and a valid web-access password are required for participation in the Late Effects Web Forum.

Figure 7: Late Effects Web Forum Instructions

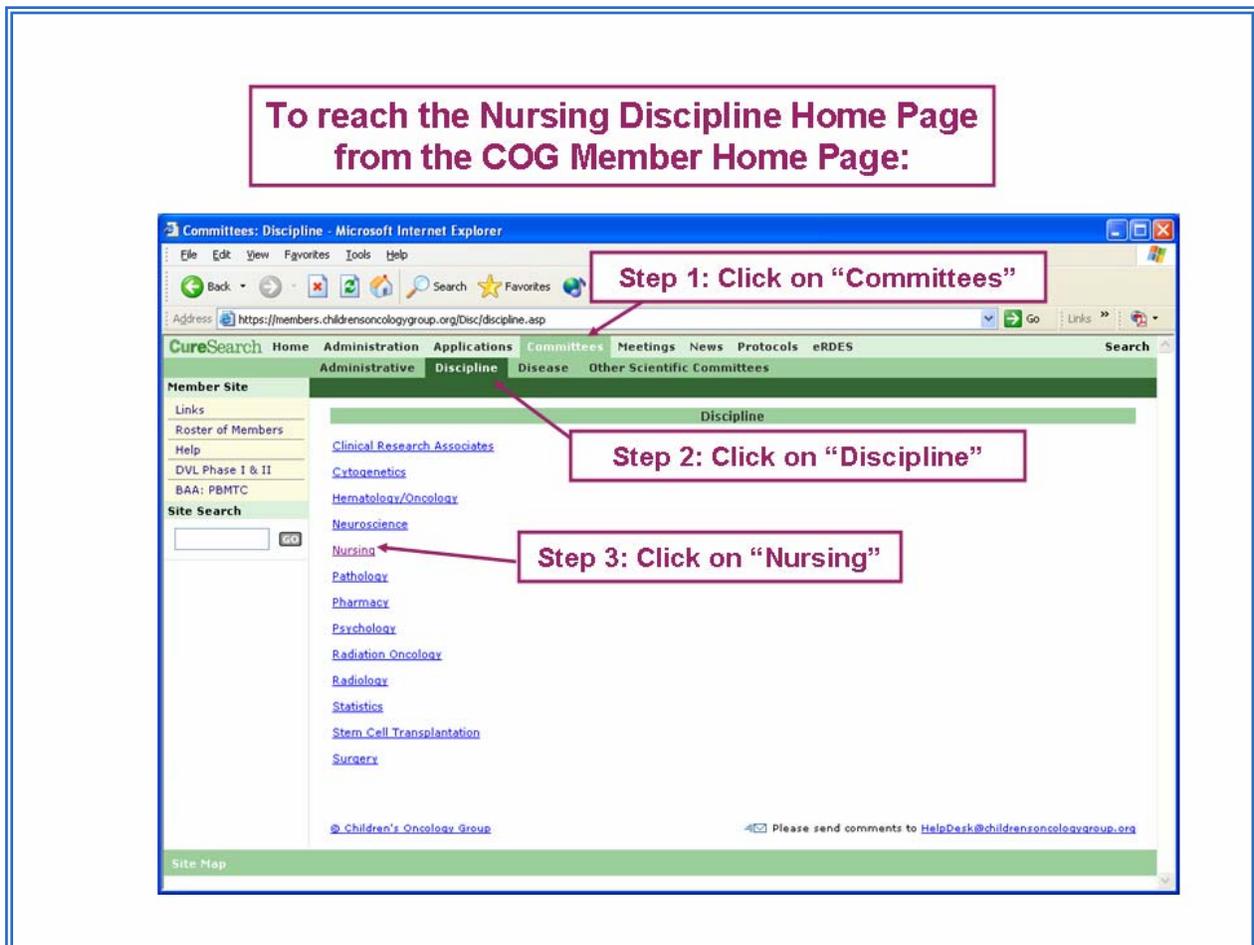


Figure 7: Late Effects Web Forum Instructions (continued)

The screenshot shows the 'Nursing Discipline' page in Microsoft Internet Explorer. The browser address bar shows the URL: <https://members.childrensoncologygroup.org/Disc/nursing/default.asp>. The page has a green header with navigation tabs: Home, Administration, Applications, Committees, Meetings, News, Protocols, eRDES. Below the header is a sidebar with 'Member Site' and 'Nursing Links' sections. The 'Nursing Links' section contains a list of links, with 'Late Effects Forum' circled in red. A callout box with a red border and arrow points to this link, containing the text: 'Then click on "Late Effects Forum"'. The main content area shows a 'NURSING' section with a list of recent posts, a 'Mission' statement, and a 'Values' section with a bulleted list of core values.

The screenshot shows the 'COG - eRDES' forum page in Microsoft Internet Explorer. The browser address bar shows the URL: [https://members.childrensoncologygroup.org/containers/Default\\_Container.aspx?c=13871370182210&ID=1822&VL=1&PID2=0&EID=0&SID=13878CC](https://members.childrensoncologygroup.org/containers/Default_Container.aspx?c=13871370182210&ID=1822&VL=1&PID2=0&EID=0&SID=13878CC). The page has a green header with navigation tabs: Home, Administration, Applications, Committees, Meetings, News, Protocols, eRDES. Below the header is a sidebar with 'Members Site' and 'Site Search' sections. The main content area shows a forum list with columns for Forum, Threads, Posts, and Last Post. The 'Late Effects Forum' link is highlighted in red. A callout box with a red border and arrow points to this link, containing the text: 'Click on the "Late Effects Forum" link'. Another callout box with a red border and arrow points to the forum list, containing the text: 'You may see other forums listed (depending on your access level within COG). If so, look for "Late Effects Forum" link on the list and click it.' The forum list includes the following data:

Forum	Threads	Posts	Last Post
Late Effects Forum Group			
Late Effects Forum Created on behalf of Wendy Landier and Kathy Ruccione for Late effects group.	1	2	01-06-2006 02:56 PM by <a href="#">mosher</a>
Remote Data Entry			
RDE1 Studies RDE1 Studies	-	-	No Posts
eRDES Studies eRDES Studies	-	-	No Posts
Study Development Office			

Figure 7: Late Effects Web Forum Instructions (continued)

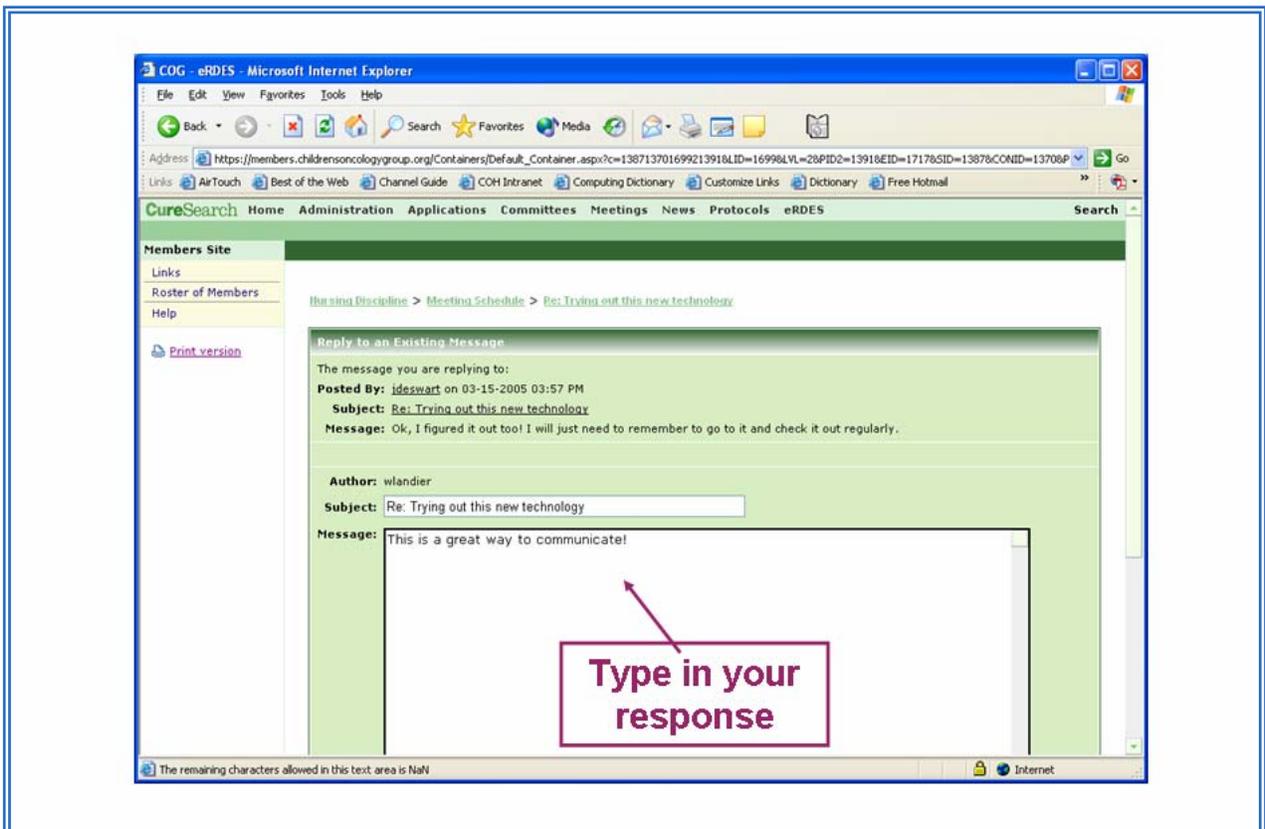
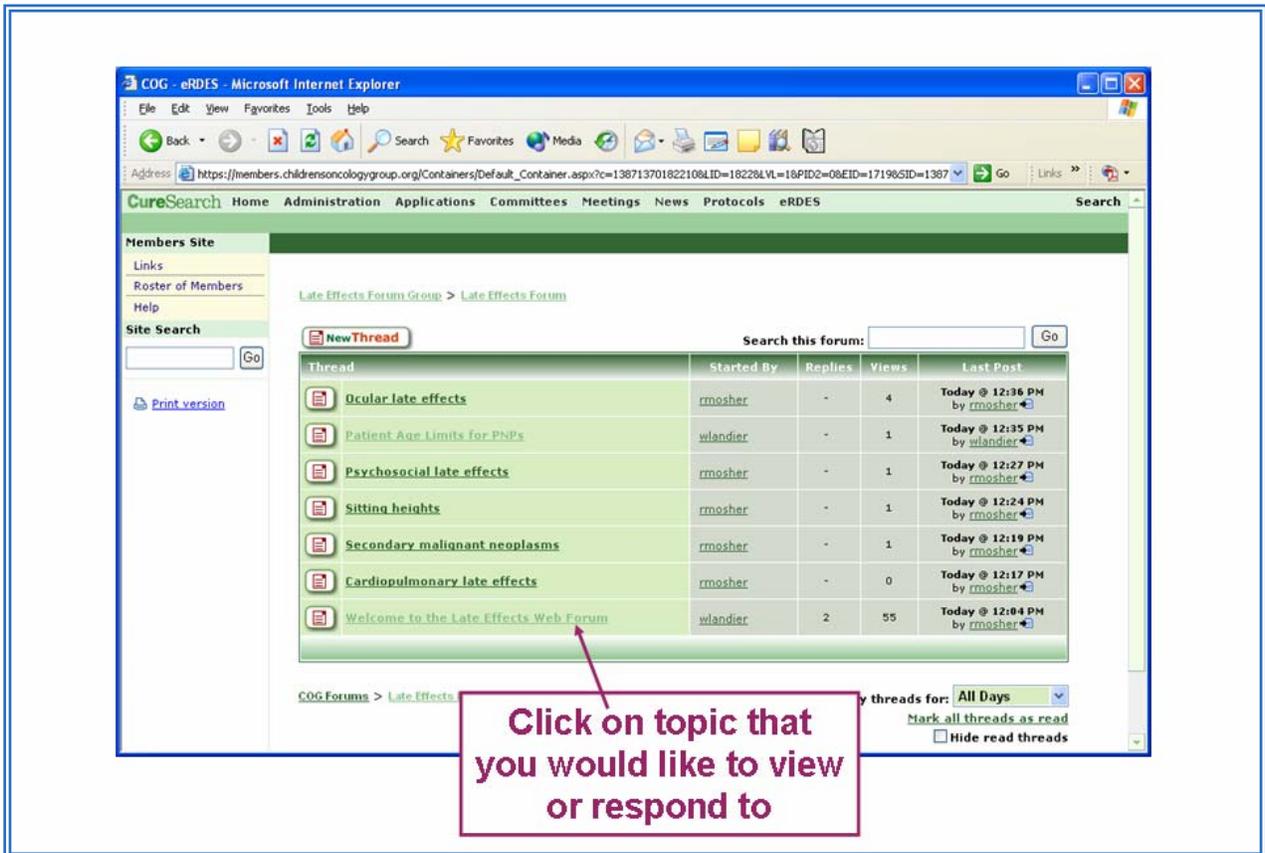


Figure 7: Late Effects Web Forum Instructions (continued)

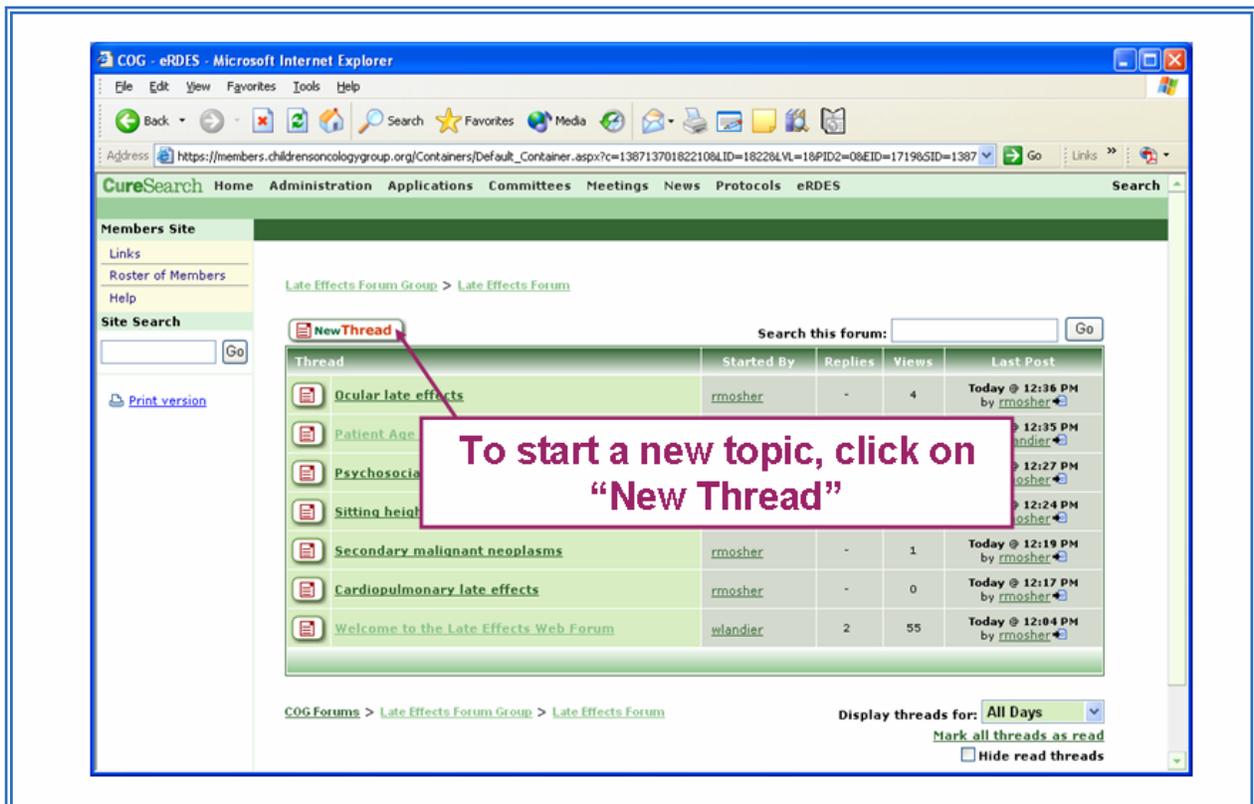
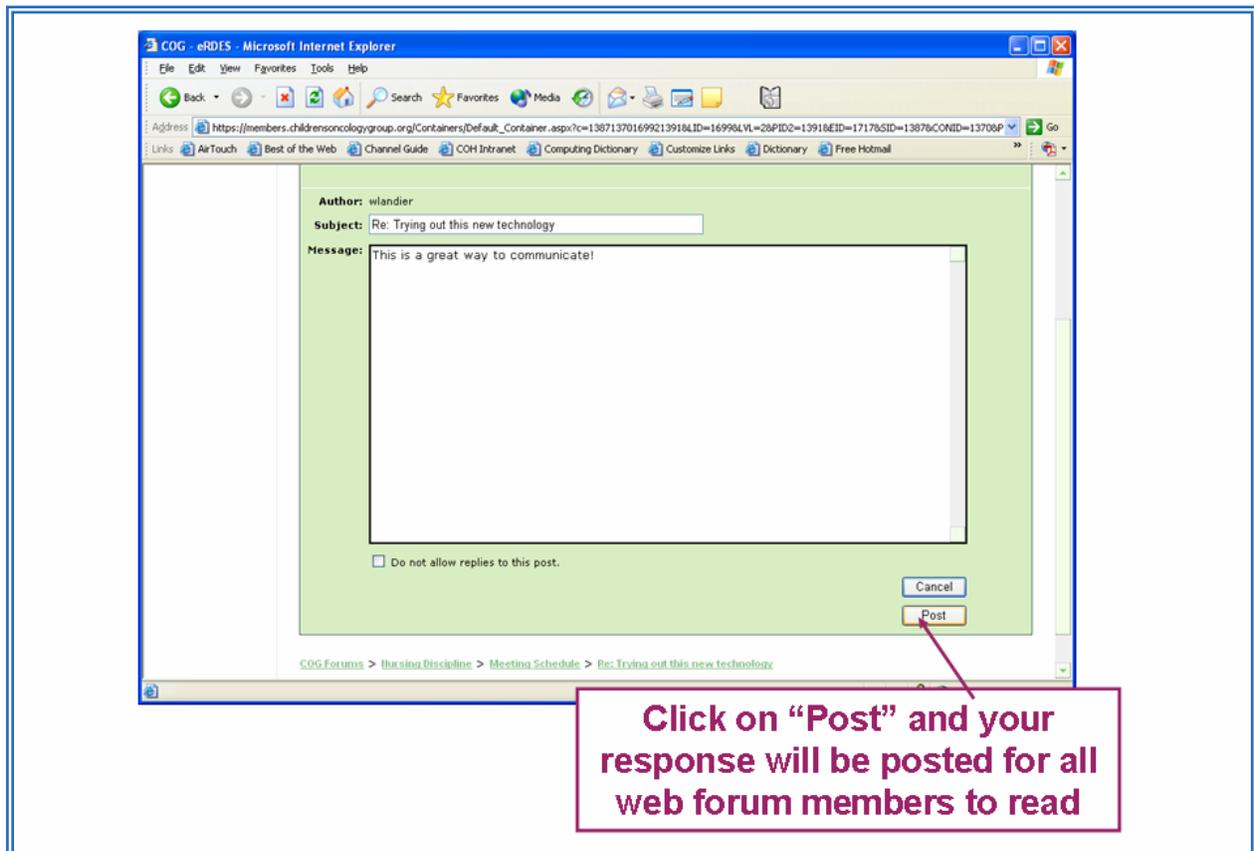


Figure 7: Late Effects Web Forum Instructions (continued)

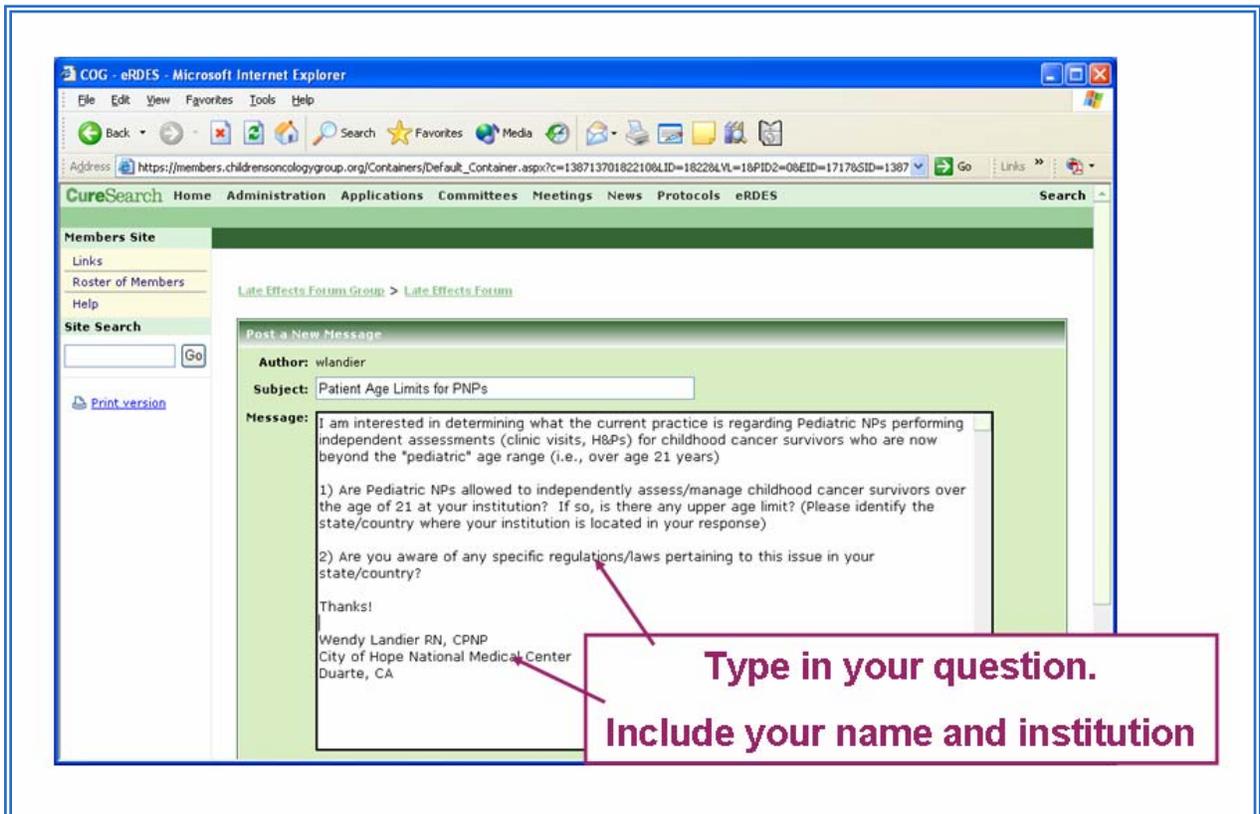
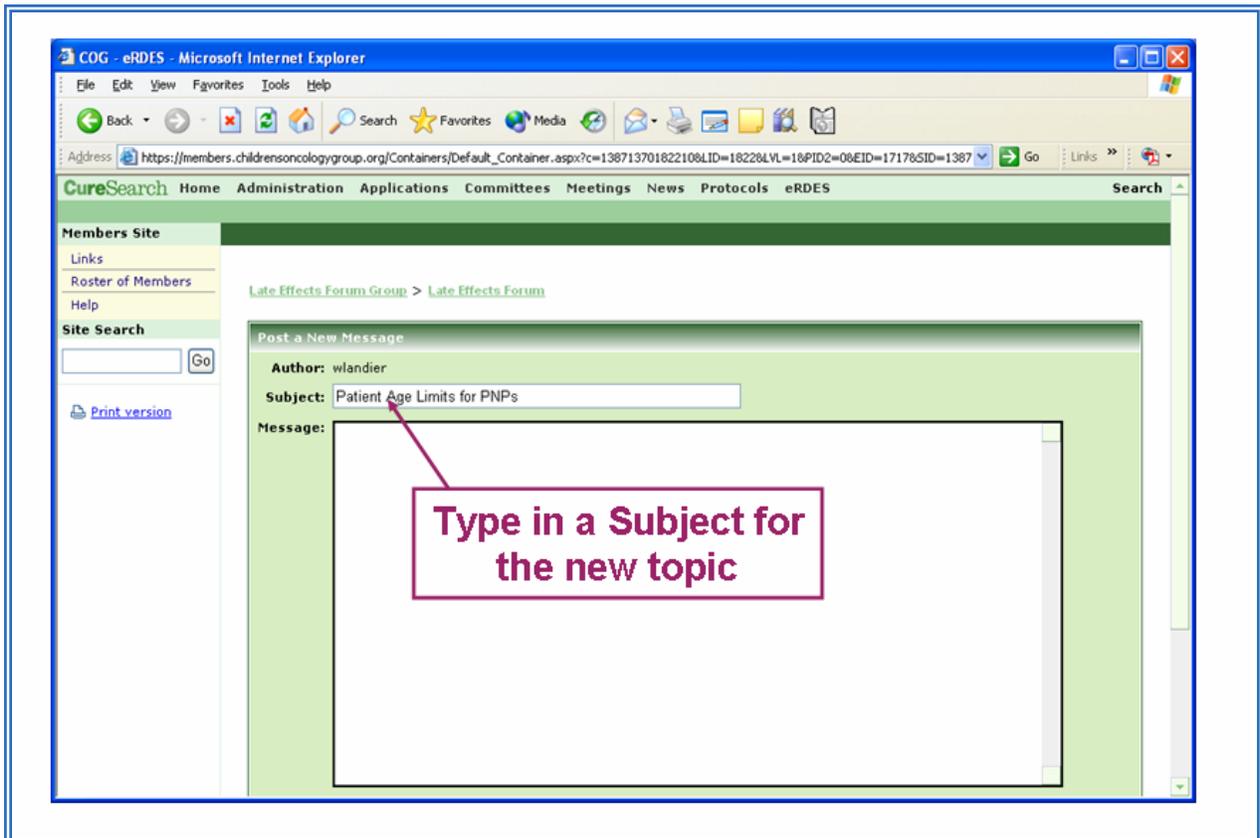


Figure 7: Late Effects Web Forum Instructions (continued)

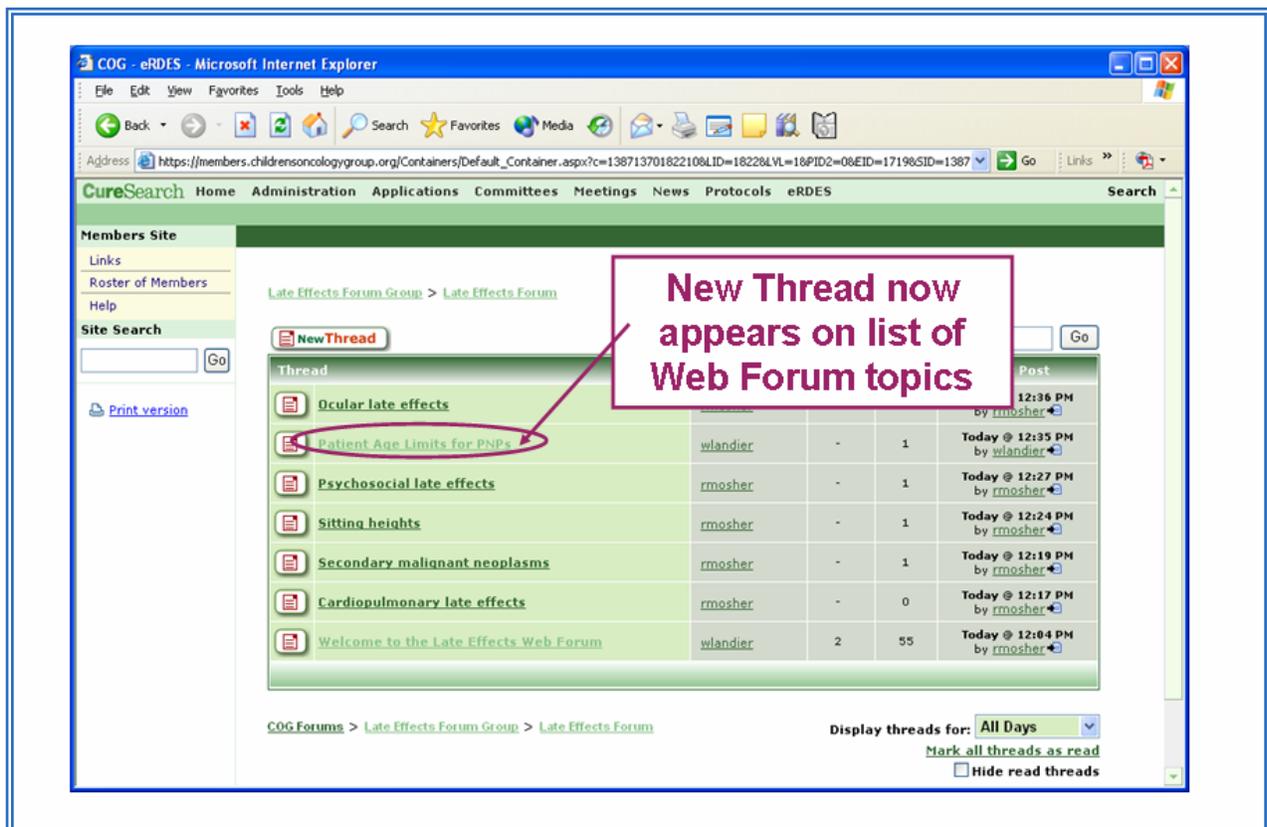
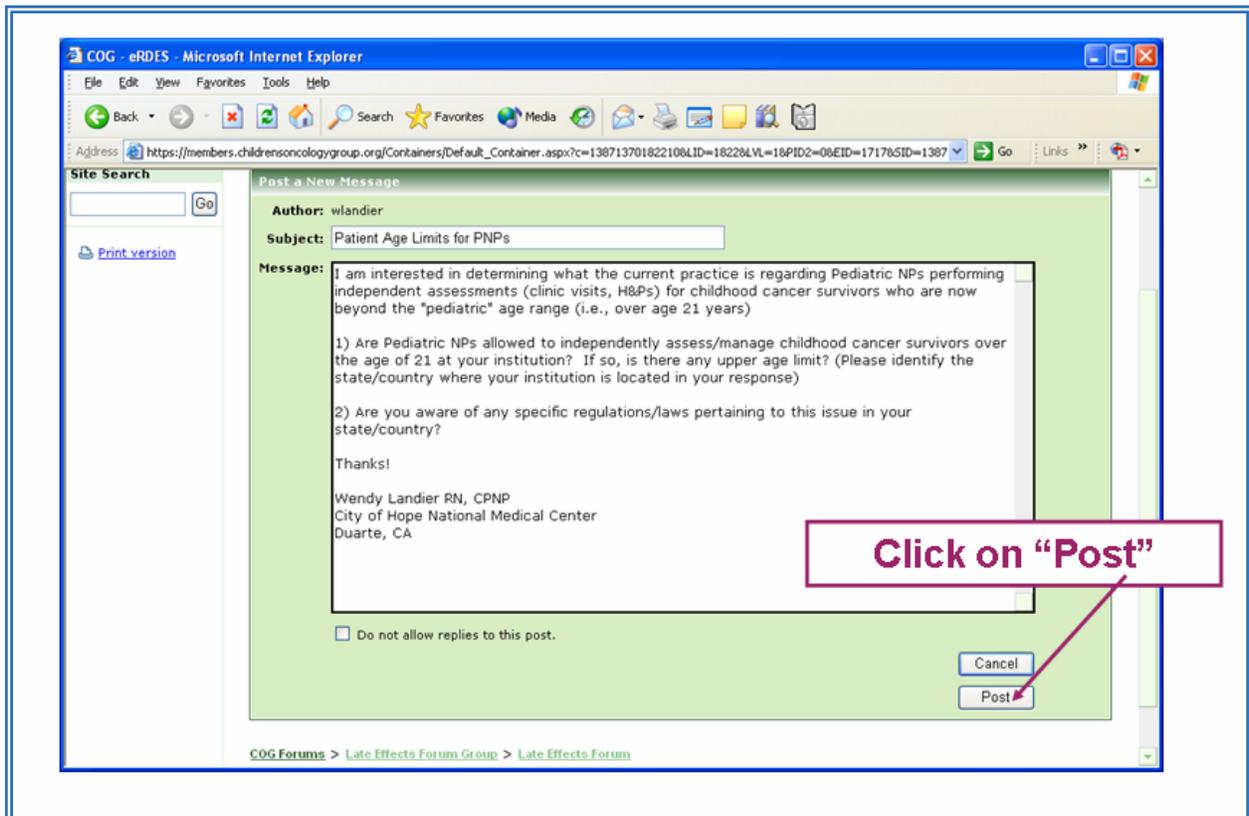
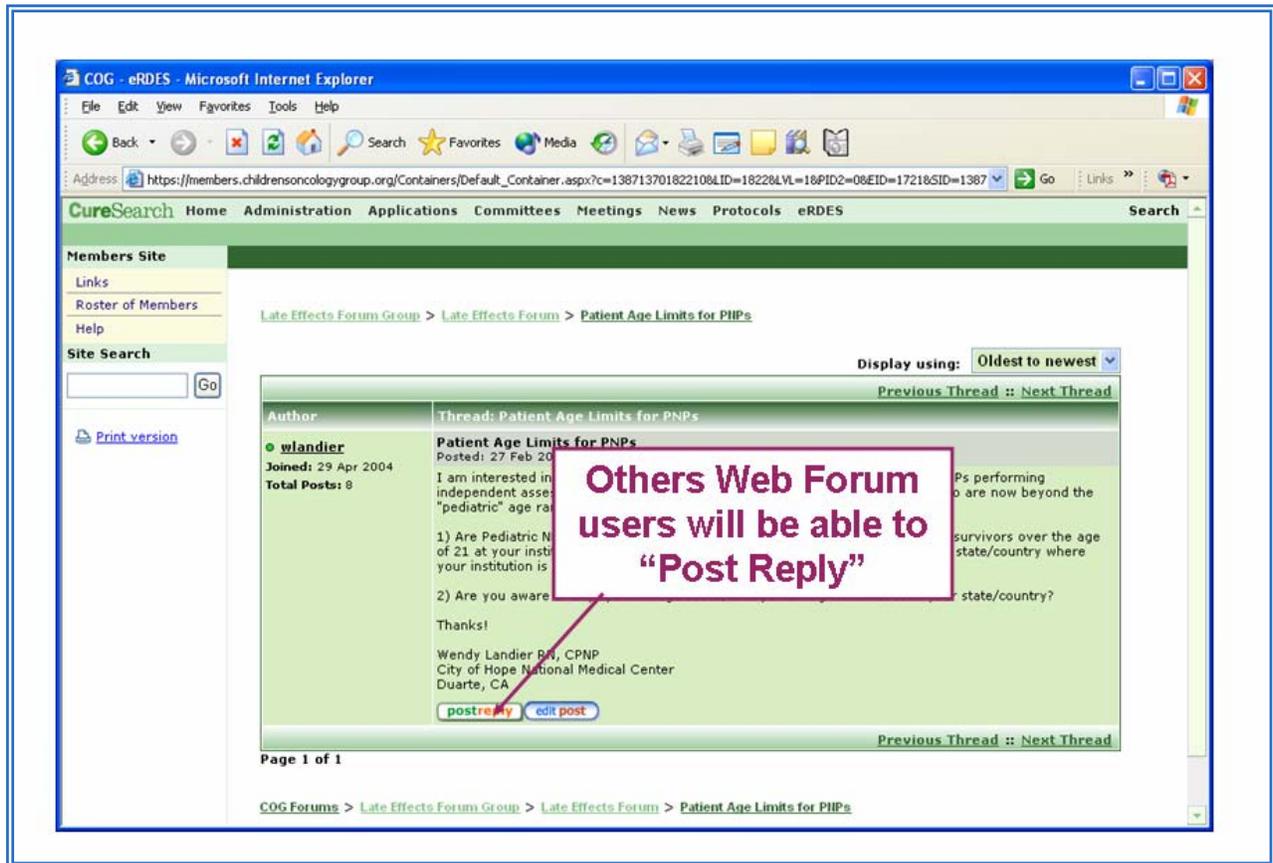


Figure 7: Late Effects Web Forum Instructions (continued)



**Late Effects Directory of Services**

The Late Effects Directory of Services is an on-line database of LTFU programs at COG member institutions, created by Debra Eshelman, RN, MSN, CPNP, and Karen Kinahan, RN, MS, APRN. Available information includes types of patients followed, service providers, names and contact information for clinic coordinators and appointment scheduling.

The Directory of Services is available to the public from the COG public website at [www.childrensoncologygroup.org](http://www.childrensoncologygroup.org) (click on "Late Effects Directory of Services") [see Figure 8]. More detailed information from the database is accessible to COG Members from the member website by clicking on "Applications" and then "Late Effects Directory of Services" (listed under the "Miscellaneous" category). Instructions are provided in Figure 9.

Figure 8: Late Effects Directory of Services on Public Website [www.childrensoncologygroup.org](http://www.childrensoncologygroup.org)

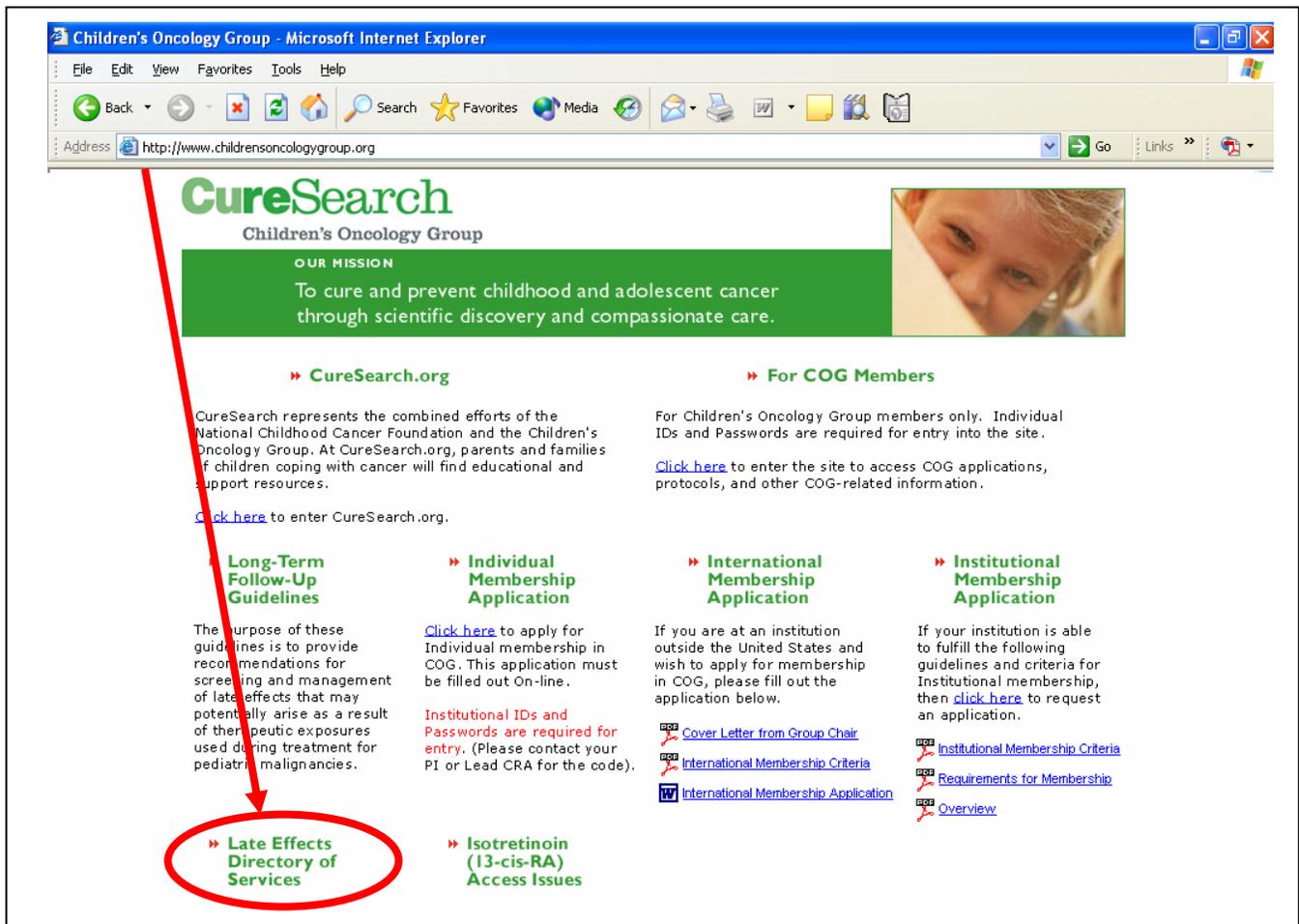


Figure 9: Instructions for Late Effects Directory of Services on COG Member Website

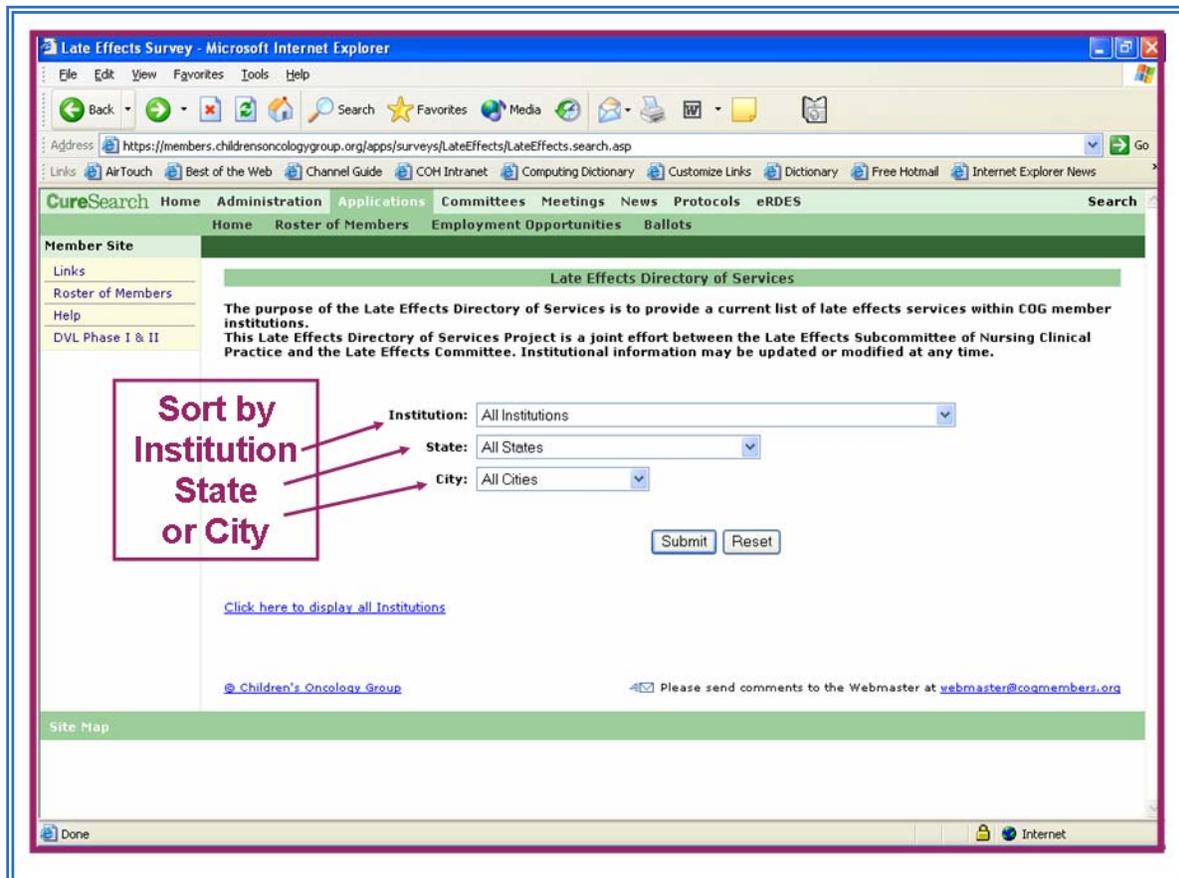
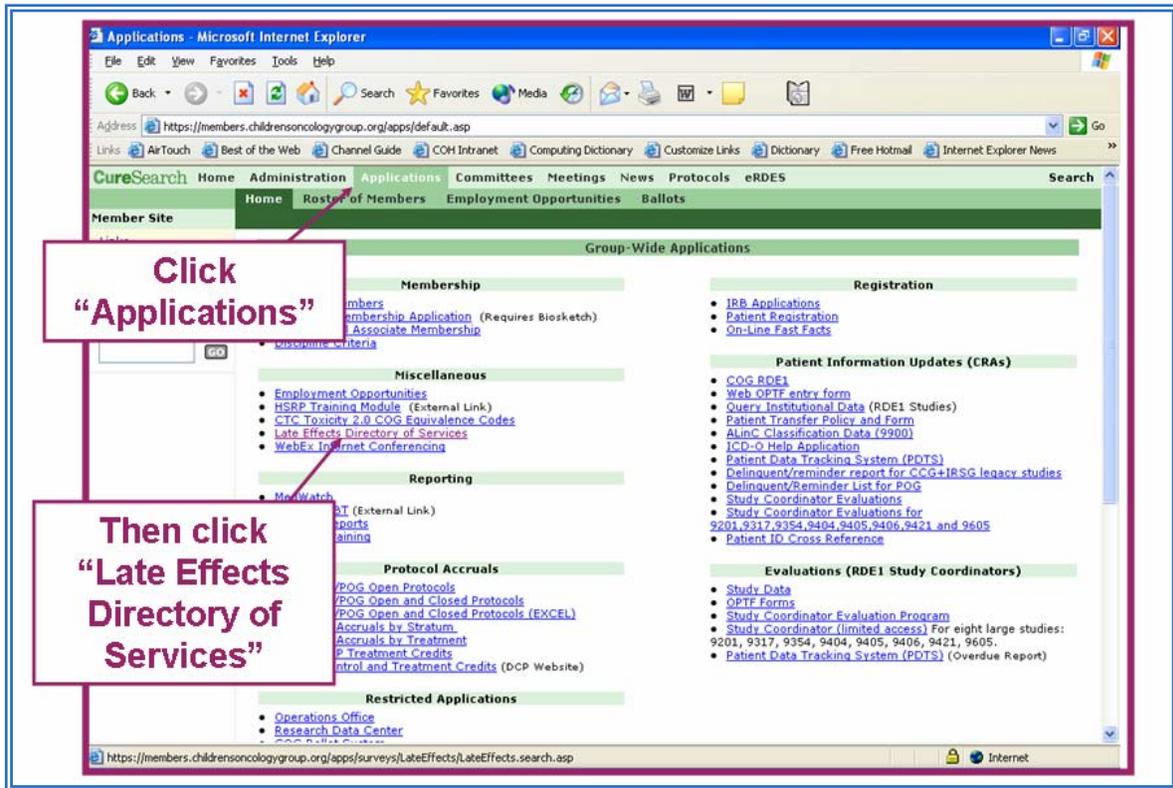


Figure 9: Instructions for Late Effects Directory of Services on COG Member Website

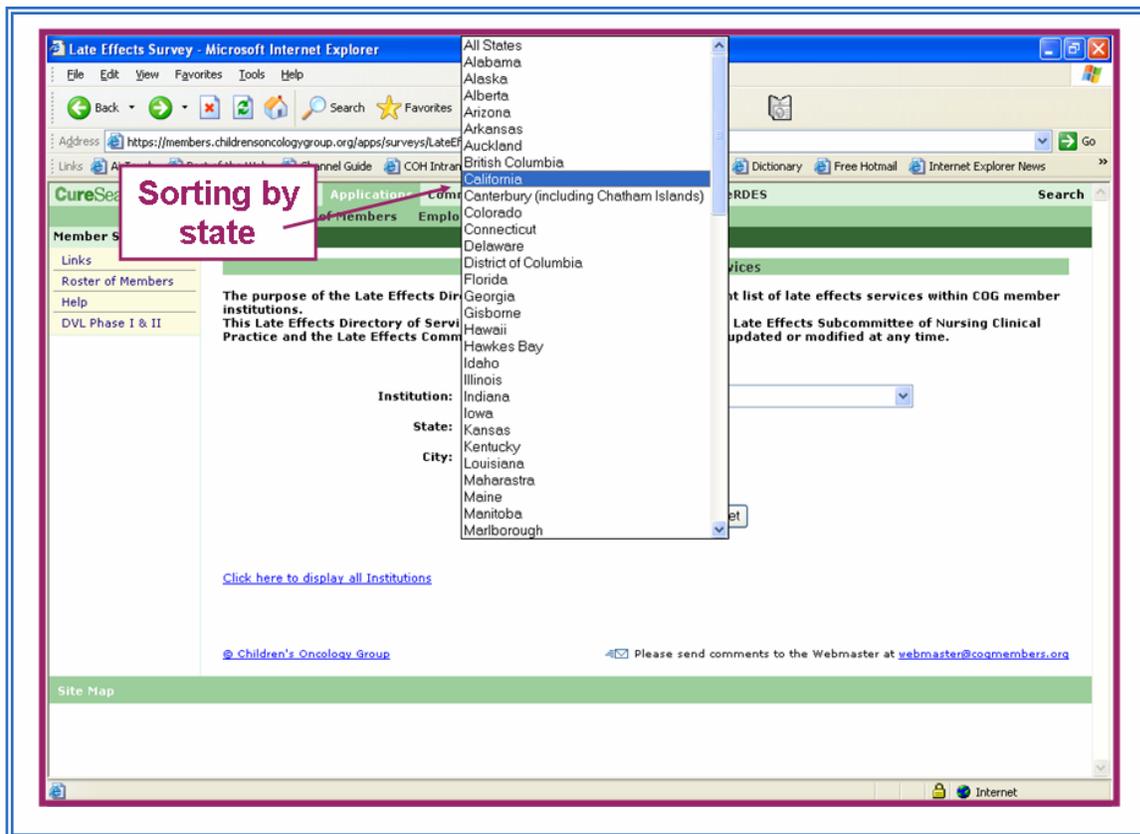
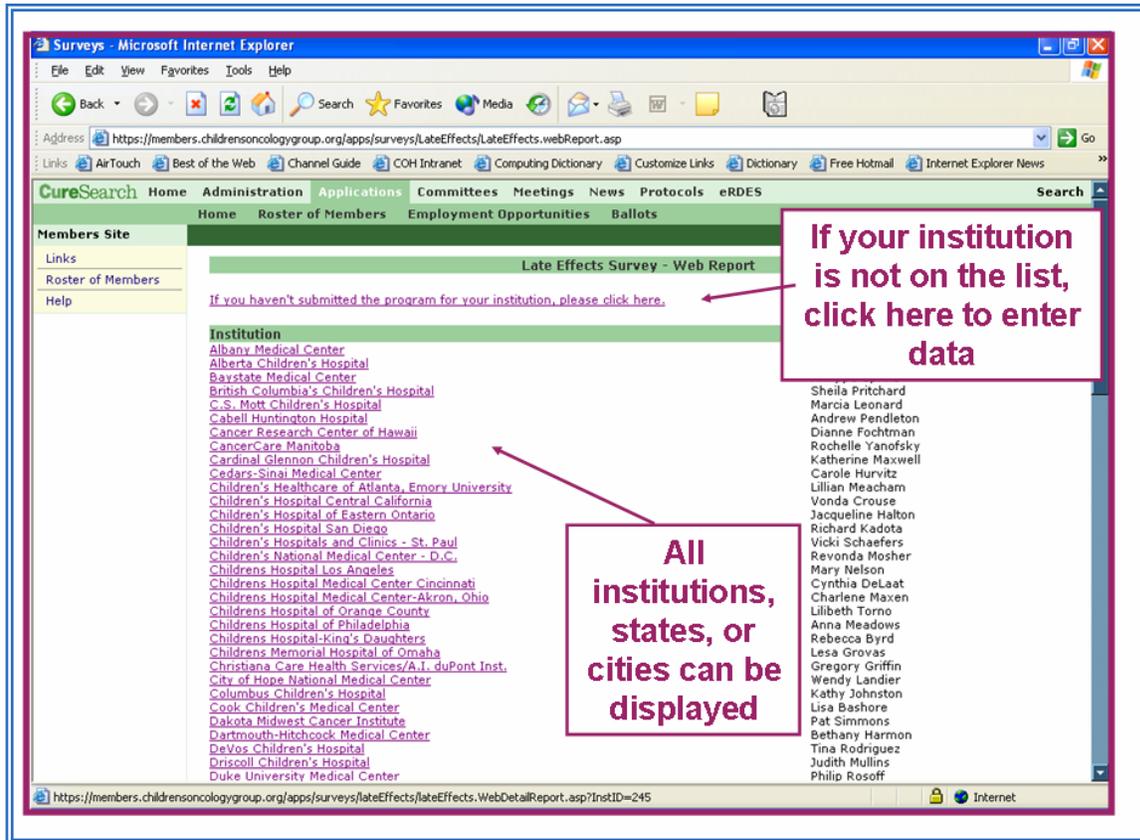


Figure 9: Instructions for Late Effects Directory of Services on COG Member Website

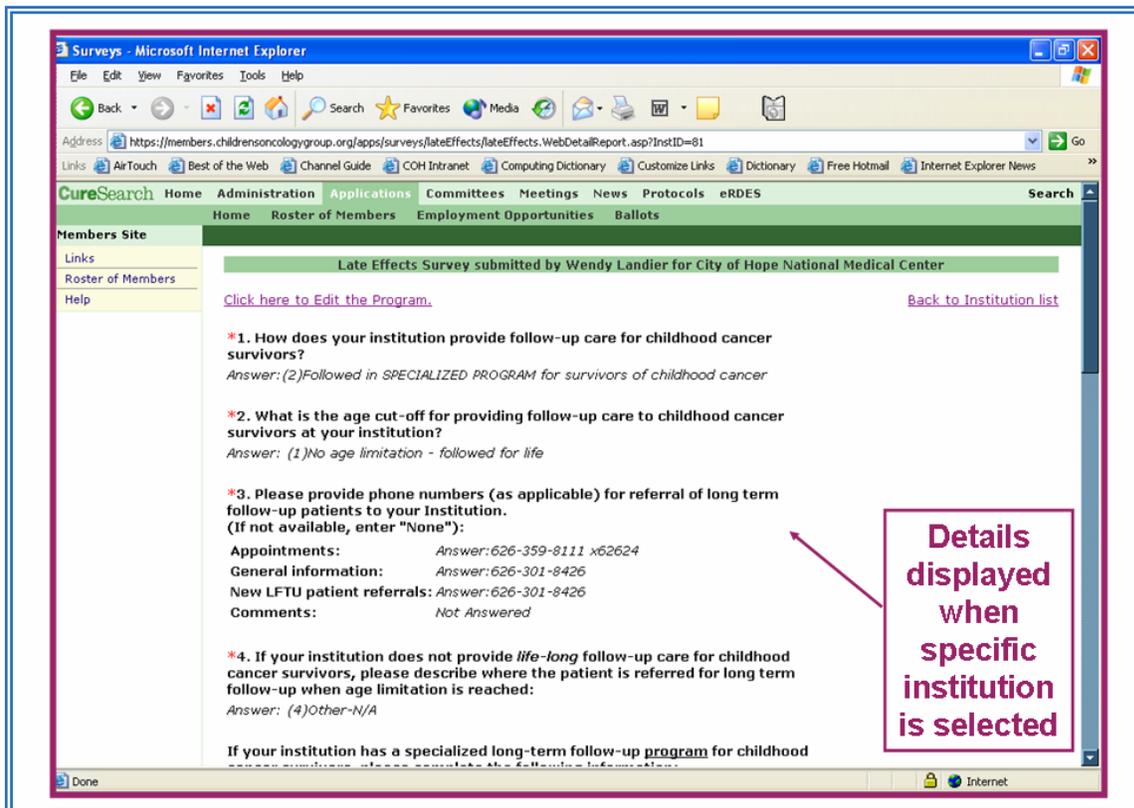
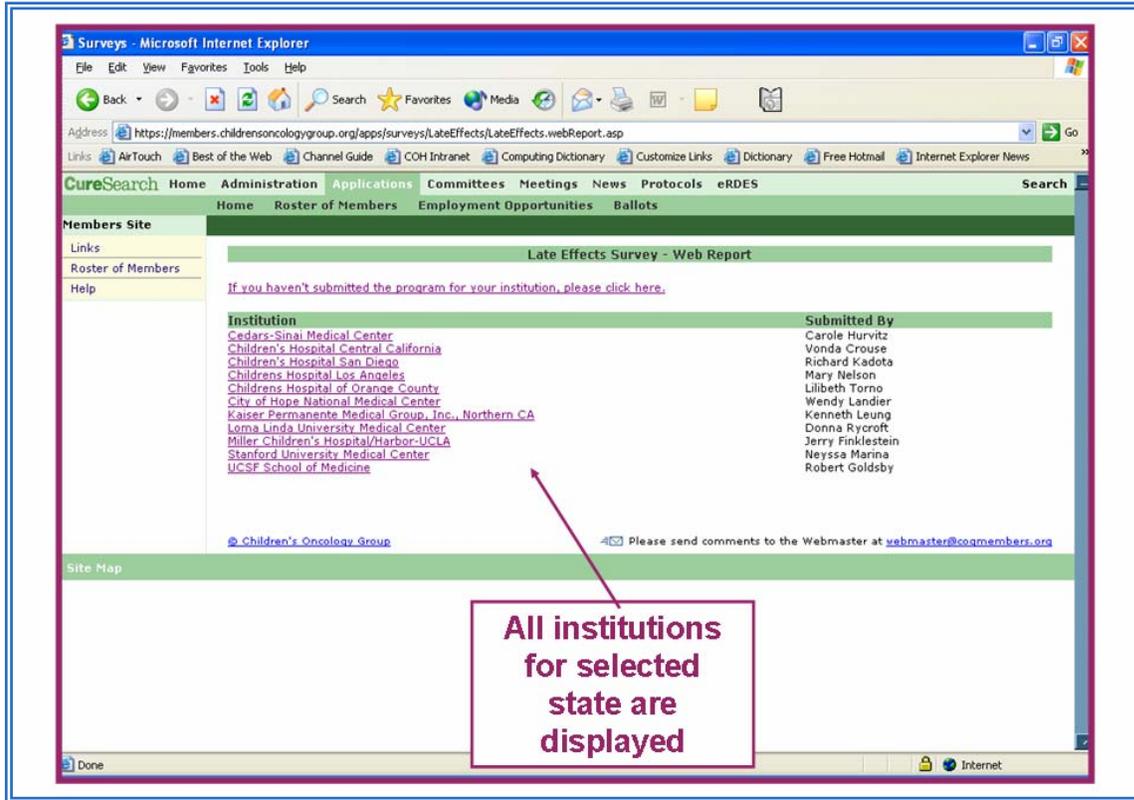


Figure 9: Instructions for Late Effects Directory of Services on COG Member Website

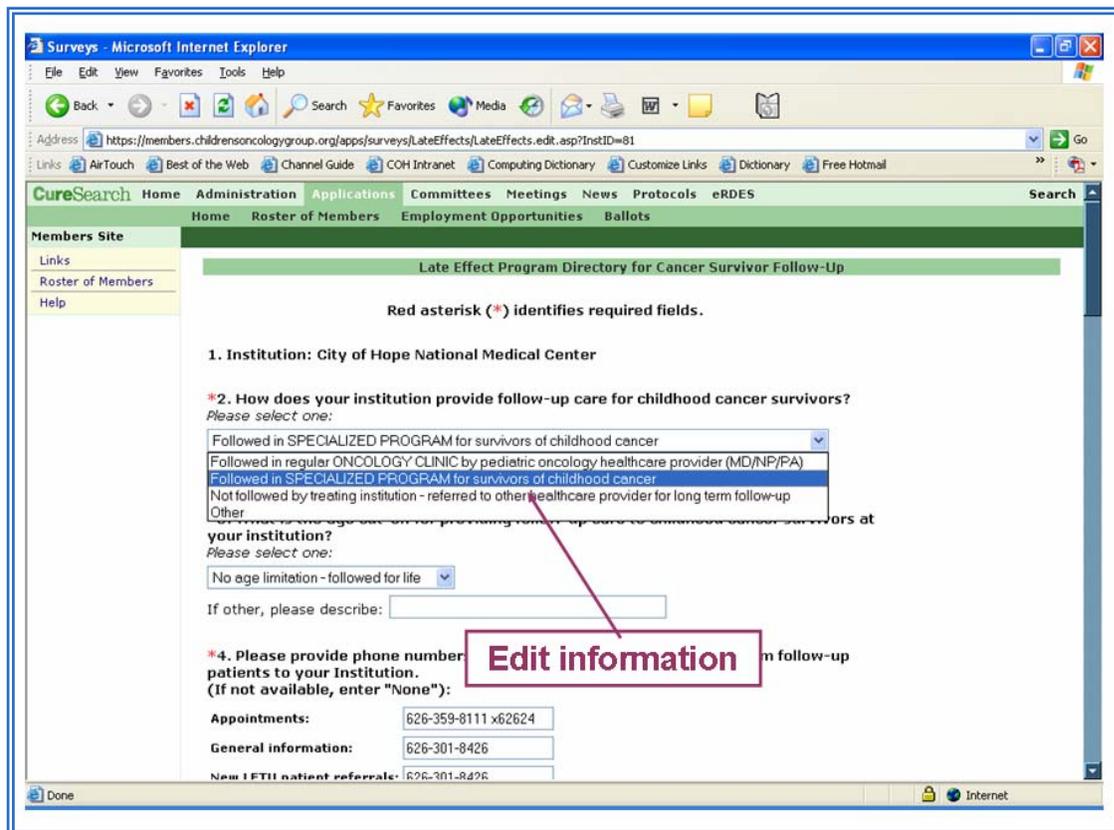
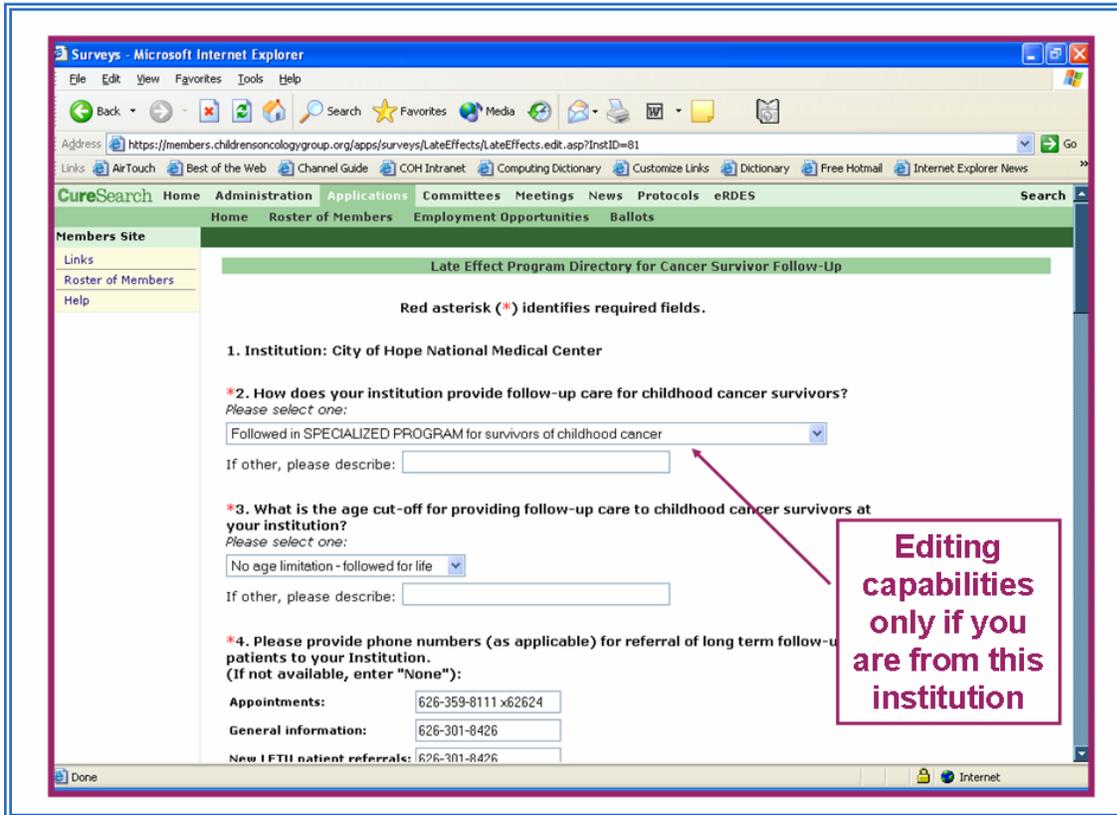
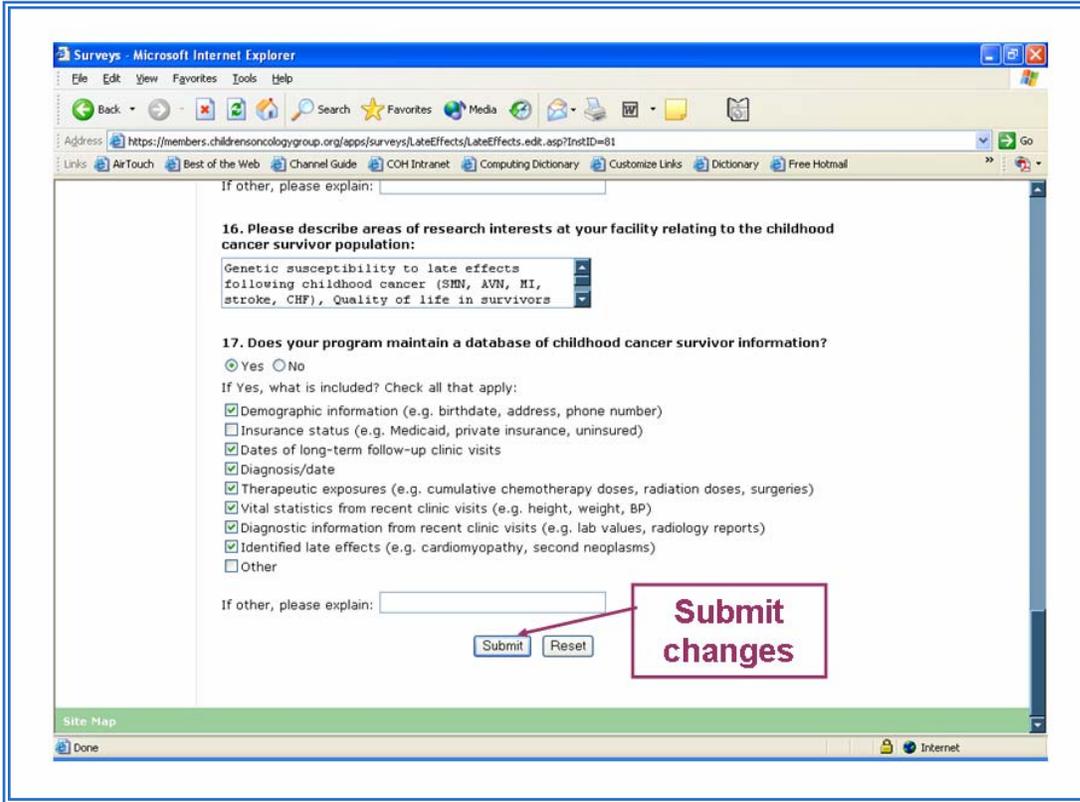


Figure 9: Instructions for Late Effects Directory of Services on COG Member Website



## APPENDIX 2: Institute of Medicine Recommendations

*With commentary by John Gates, MD  
Children's Hospital Central California  
Madera, California*



## RECOMMENDATIONS FROM THE INSTITUTE OF MEDICINE WITH COMMENTARY

The task of educating and providing services for childhood cancer survivors prompted the Institute of Medicine (IOM) to issue a report<sup>5</sup> detailing steps for improving care and quality of life for survivors of childhood cancer. Listed below are the IOM recommendations, along with comments regarding progress that has been made since the report's release in 2003, as well as ongoing challenges in survivorship care.

**RECOMMENDATION 1: *Develop evidence-based clinical practice guidelines for the care of survivors of childhood cancer.***

**Commentary:** The Children's Oncology Group (COG) established a task force to accomplish this goal, and as a result has developed a set of evidence-based LTFU guidelines known as the *Children's Oncology Group Long-Term Follow-Up Guidelines for Survivors of Childhood, Adolescent, and Young Adult Cancers*, available at [www.survivorshipguidelines.org](http://www.survivorshipguidelines.org). These guidelines identify health risks related to specific therapeutic exposures used during treatment of childhood cancer and provide recommendations for screening and management of late effects in childhood cancer survivors.

In addition to having a plan for medical follow-up, it is also important to design a healthcare system responsive to the full range of survivors' healthcare needs. The IOM report recommends development of comprehensive multidisciplinary follow-up programs for childhood cancer survivors that include the following:

- Psychological services to address psychological implications of cancer for survivors and their families
- Educational support through school transition programs
- Personnel to assist with insurance and employment issues
- A transition plan to facilitate the transfer of survivors into adult systems of care as they reach young adulthood

Although many COG institutions provide medical follow-up care for childhood cancer survivors, not all institutions currently provide multidisciplinary programs addressing this full range of survivor care.

**RECOMMENDATION 2: *Define a minimum set of standards for systems of comprehensive, multidisciplinary follow-up care that link specialty and primary care providers (PCPs), ensure the presence of such a system within institutions treating children with cancer, and evaluate alternate models of delivery of survivorship care.***

**Commentary:** Providing a network of specialty and primary care providers to manage the multiple aspects of care required by childhood cancer survivors is often complicated by multiple factors, including time, distance, and insurance-related issues. A survivor may need coordination of care involving multiple specialists, such as a cardiologist, neurologist, endocrinologist, surgeon, ophthalmologist, physical therapist, neuropsychologist and oncologist, as well as continue to require vaccines, check-ups, dental care, specialized educational services and/or vocational counseling and community support. Obtaining access to any one of these requires time, financial

resources, effort, the correct referrals, and persistence. Survivors may require many or all of these services, and often face the challenge of navigating complex healthcare systems with variable results.

**RECOMMENDATION 3: *Improve awareness of late effects and their implications for long-term health among childhood cancer survivors and their families.***

**Commentary:** Inadequate knowledge regarding diagnosis and treatment among childhood cancer survivors has been documented, and many survivors are also unaware of their risk for late effects. Although wellness education and care summaries are provided through many LTFU programs, a recent report from the Childhood Cancer Survivor Study revealed that the likelihood of a survivor undergoing a general physical exam or cancer-related visit within a two-year period decreased substantially as the survivor aged or as the time interval from diagnosis increased, and that only a minority of adult survivors of childhood cancer received risk-based healthcare (Oeffinger et al., 2004). Many survivor programs use multidisciplinary teams to provide education and resources regarding late effects - including psychosocial and wellness issues - using an array of formats (e.g., booklets, handouts, workshops). However, these programs are often geographically distant from survivors and may not serve patients who are beyond the pediatric age range.

**RECOMMENDATION 4: *Improve professional education and training regarding late effects and their management for both specialty and PCPs.***

**Commentary:** Many times the PCP is the one responsible for ongoing health management of childhood cancer survivors. PCPs may lack adequate information and resources in order to: 1) verify health risk factors of survivors; 2) stay up-to-date with research and developments in the area of late effects; 3) become familiar with the support and educational resources available; and 4) effectively provide quality long-term survivor services. Emphasis on survivorship issues in the curricula of both primary and specialty training programs will help with this process, but ongoing education to physicians and multidisciplinary specialty providers who may encounter childhood cancer survivors in their practices is also essential.

**RECOMMENDATION 5: *The Health Resources and Services Administration's Maternal and Child Health Bureau and its partners should be fully supported in implementing the "Healthy People 2010" goals for children with special healthcare needs. These efforts include a national communication strategy, efforts at capacity building, setting standards, and establishing accountability.***

**Commentary:** Although many childhood cancer survivors attain a high quality of life following completion of treatment, a significant number are faced with late effects and medical problems similar to individuals with other chronic illnesses and disabling conditions. Strengthening public programs serving children and adults with special needs and ensuring childhood cancer survivors have appropriate access to services is a priority.

**RECOMMENDATION 6:** *Federal, state, and private efforts are needed to optimize childhood cancer survivors' access to appropriate resources and delivery systems through both health insurance reforms and support of safety net programs such as Health Resources and Services Administration's community and migrant health centers.*

**Commentary:** Ideally everyone, regardless of medical history or employment status, should have health insurance coverage and access to affordable healthcare. In lieu of national healthcare reform in the United States, support for childhood cancer survivors may be provided by state legislation targeting their specific issues. Such changes may allow survivors access to affordable healthcare services and prevent them from being excluded from receiving healthcare when they need it most.

**RECOMMENDATION 7:** *Public and private research organizations (e.g., the National Cancer Institute, the National Institute for Nursing Research, the American Cancer Society) must increase support for research to prevent or ameliorate the long-term consequences of childhood cancer. Priority areas of research include assessing the prevalence and etiology of late effects; testing methods that may reduce late effects during treatment; developing interventions to prevent or reduce late effects after treatment; and furthering improvements in quality of care to ameliorate the consequences of late effects on individuals and families.*

**Commentary:** Understanding and preventing or adequately treating the complications associated with surviving childhood cancer will allow this population to achieve the best health status possible. Only when this is achieved can we truly say that we have conquered childhood cancer.

## APPENDIX 3: Sample Forms and Letters for use in Long-Term Follow-Up Clinics



## APPENDIX 3

### PROCEDURES

PREPARATION FOR CLINIC (UCSF)

### CLINICAL FORMS

CLINICAL SUMMARY FORM (CAROLINAS MEDICAL CENTER)

CLINICAL SUMMARY FORM (NORTHWESTERN UNIVERSITY)

COMBINED CLINICAL SUMMARY/H&P [INITIAL/NON-TRANSPLANT] (UNIV OF MICHIGAN)

COMBINED CLINICAL SUMMARY/H&P [INITIAL/TRANSPLANT] (UNIV OF MICHIGAN)

COMBINED H&P/PATIENT EDUCATION FORM [SUBSEQUENT] (UNIV OF MICHIGAN)

COMBINED CLINICAL SUMMARY/OFF-THERAPY EVAL FORM (CHOP)

H & P FORM (CITY OF HOPE)

H & P FORM - TRANSPLANT (HELEN DEVOS CHILDREN'S HOSPITAL)

PSYCHOSOCIAL ASSESSMENT FORM – SOCIAL WORK (UNIV OF MICHIGAN)

NUTRITION ASSESSMENT FORM (UNIV OF MICHIGAN)

PSYCHOLOGY ASSESSMENT FORM (CITY OF HOPE)

PATIENT EDUCATION/HEALTH LINKS FORM (CAROLINAS MEDICAL CENTER)

### QUESTIONNAIRES

BASELINE QUESTIONNAIRE, ENGLISH/SPANISH (COOK CHILDREN'S HOSP)

COMBINED ANNUAL QUEST/H&P/EDUCATION/FAMILY HX FORM (ST. JUDE)

ANNUAL QUESTIONNAIRE (UCSF)

ANNUAL QUESTIONNAIRE: CHILD/TEEN, ENGLISH/SPANISH (CITY OF HOPE)

ANNUAL QUESTIONNAIRE: ADULT, ENGLISH/SPANISH (CITY OF HOPE)

### LETTERS

APPOINTMENT LETTER (HELEN DEVOS CHILDREN'S HOSPITAL)

APPOINTMENT LETTER (COOK CHILDREN'S HOSPITAL)

APPT REMINDER LETTER, ENGLISH/SPANISH (COOK CHILDREN'S HOSPITAL)

AUTHORIZATION LETTERS, STATE FUNDED PROGRAM (MILLER CHILDREN'S)

POST-CLINIC LETTER TO PATIENT (CAROLINAS MEDICAL CENTER)

POST-CLINIC LETTER TO PHYSICIAN (UNIV OF MICHIGAN)

POST-CLINIC LETTER TO PHYSICIAN (UCSF)

# PROCEDURES

## PROCEDURE: PREPARATION FOR CLINIC

*UCSF*  
*San Francisco, CA*

**UCSF Survivors of Childhood Cancer Program  
Preparing for Long-Term Follow-Up Clinic**

**Pre-Clinic**

**1.) Gather patient data, via an extensive medical record review**

- a. Gather data from medical records, FoxPro and STOR records (if seen at UCSF)
  - i. Demographic Data (Name, Gender, Date of Birth, Contact Info)
  - ii. Diagnosis
    1. Include site, stage, date, relapses, metastases, etc.
  - iii. Protocol(s) treated on
    1. Start/End Dates, Note if treated on or off study
  - iv. Chemotherapies (Agents, doses, cumulative doses)
    1. Critical information by agent:
      - a. Methotrexate and Cytarabine
        - i. High dose = any single dose  $\geq 1000$  mg/m<sup>2</sup>
      - b. Carboplatin
        - i. Myeloablative Dose = conditioning dose for HCT (BMT)
      - c. Daunorubicin, Doxorubicin, Epirubicin, Idarubicin, Mitoxantrone
        - i. Note age at first dose
      - ii. Cumulative Dosages critical
  - v. Radiation Therapy Summary
    1. Type of radiation therapy (external beam, IMRT, etc), Fields involved, start/stop dates, # of fractions, dose per fraction, total dose in cGy
    2. Note age at time of XRT for the following fields of radiation
      - a. Thoracic Spine, Mantle, Mediastinal, Chest/Thorax, Axilla, Whole Abdomen, or any Abdomen field
  - vi. HCT Data (Bone Marrow Transplant/Hematopoietic Cell Transplant)
    1. Type of transplant, source of cells, cell donor, conditioning regimen, GVHD prophylaxis and treatment
    2. *These records are not always included in the general medical record, but are available from the UCSF BMT Department (if treated at UCSF).*
    3. Take note if patient experienced chronic GVHD.
  - vii. Surgical Procedure Summary
    1. Type of surgery, date, site, surgeon
  - viii. Other therapeutic modalities
    1. MIBG, I-131, Bioimmunotherapy (G/GM-CSF, etc.)
  - ix. Significant complications during/after treatment
    1. Any significant interval history since treatment
    2. Past medical problems
    3. Adverse drug reactions/allergies
- b. Enter all gathered data into database

**2.) Print Pre-Appointment Form**

- a. This summarizes the treatment information for the patient.

**3.) Find patient-specific guidelines**

- a. Using the "Patient-Specific Guideline Identification Tool", check off and fill in information appropriate to patients.
  - i. Find the applicable guideline sections in the Long Term Follow-Up Guidelines
  - ii. Fill in appropriate Baseline Examinations and Recommended Follow-Up Examinations in the database

**4.) Make Dictation**

- a. Output a dictation template from the database
- b. Open the Dictation Template file in the "Clinic Preparation Templates" folder.
  - i. Save template for the current patient in the "Patient Information" folder, under "Dictations"
    1. Name the file with the patient's name (Last, First, Medical Record #)
  - ii. Customize template for the patient's information
    1. Fill in patient's name where necessary, and customize paragraphs to match patient data (change his/her to gender-specific identifier)
    2. Paste in Cancer information, Protocol, Chemotherapy, Surgery, Radiation, Past Medical Problems, Baseline Examinations, and Recommended Follow-Up from database-outputted document.
    3. Customize the "Assessment and Long-Term Follow-Up Recommendations" section to the patient, removing non-pertinent sections based on which drugs the patient was treated with.

**5.) Create a "Patient Follow-Up Letter", and print HealthLinks**

- a. Customize for the patient, indicating which baseline examinations need to be completed.
- b. Print out patient-specific HealthLinks from [www.survivorshipguidelines.org](http://www.survivorshipguidelines.org), when indicated by the LTFU Guidelines

**6.) Create Lab Requisitions**

- a. Based on patient's recommended baseline examinations, in accordance to the follow-up letter, create appropriate lab requisitions.

**7.) Assemble Patient Chart**

- a. Label chart with patient name and MRN
- b. Place all history and roadmaps in the first section, left side
- c. Place the "Pre-Appointment Form" in the first section, right side.
- d. Place Dictation Template in second section, left side.
- e. Place a "patient intake form" and growth chart in second section, right side
- f. Print out a copy of the "Patient Questionnaire" and place in the third section, left side.
- g. Print out and place social work packet in third section, right side.
- h. Clip all HealthLinks together, placing the "Patient Follow-Up Letter" on top, and lab requisitions on bottom, and place loose in third section.

**During Clinic**

- 1.) Greet patient, and introduce questionnaire**
- 2.) Following patient's visit, update database with any new information provided by the questionnaire.**
  - a. If the patient's current outside doctor has changed from what is currently listed on the dictation template, change to reflect patient's current doctor.
  - b. Add patient's address to carbon copy section if patient opted to receive letter.
- 3.) Ensure that doctor has made or will make a STOR dictation, so that the letter can be pasted in ASAP.**

**After Clinic**

- 1.) Assist MDs in completing dictations when appropriate.**
- 2.) E-Mail to Karon once all dictations are complete, indicating that they can be sent.**
  - a. If passport requires any corrections:
    - i. Update and re-print passport, and send to patient along with dictation.
- 3.) Follow up with patients regarding labs, etc.**
- 4.) Return charts to Medical Records**
  - a. Place all medical records ready for return into a box, and put in right side corner of conference room
  - b. E-Mail to Jackie indicating which boxes are ready to be returned to Medical Records
    - i. Assist her if necessary

# CLINICAL FORMS

## CLINICAL SUMMARY FORM

*Carolinas Medical Center  
Charlotte, NC*

## PATIENT SUMMARY FORM

### Letterhead

## Summary Disease, Treatment and Follow-up

*(patient name):*

This is your pediatric oncology, long-term follow-up summary, which should be shared with your doctor(s) and kept in your personal files.

**Medical Record Number:**

**Diagnosis:**

**Date of Diagnosis:**

**Age at Diagnosis:**

**Summary of presentation:**

**Treatment Summary:**

1) **Surgery:**

2) **Chemotherapy:**

3) **Radiation Therapy:**

4) **Complications:**                      **Protocol #** \_\_\_\_\_

**Date off Treatment:**

**Potential Problem:**

**Recommendation:**

These are the specific risks and recommendations for your medical follow-up based upon your disease and treatment.

- 1)
- 2)
- 3).....

General recommendations for all cancer survivors include:

- 1) yearly physical exams with primary care provider
- 2) yearly dental exams
- 3) yearly ophthalmology ....

## **CLINICAL SUMMARY FORM**

***Northwestern University (STAR Program)  
Chicago, IL***





Name:

**Cardiac Studies:**

<u>Type</u>	<u>Date</u>	<u>Results</u>

**Endocrine Studies:**

<u>Type</u>	<u>Date</u>	<u>Results</u>

**Other Studies:**

<u>Type</u>	<u>Date</u>	<u>Results</u>

Name:

**Psychosocial/Neurocognitive:**

- Marital Status:**
- Pregnancies:**
- Viable Offspring:**
- Employed:**
- Occupation:**
- Insurance:**
- Education – Highest Level:**
- Special Education:**

**Past Medical Concerns:**

**Known Late Effects:**

- |  |  |
|--|--|
| <input type="checkbox"/> Growth                    | <input type="checkbox"/> Cardio-vasc               |
| <input type="checkbox"/> Obesity/FTT               | <input type="checkbox"/> Pulmonary                 |
| <input type="checkbox"/> Immunologic               | <input type="checkbox"/> GI                        |
| <input type="checkbox"/> a/c GVHD                  | <input type="checkbox"/> Hepatic                   |
| <input type="checkbox"/> ENT                       | <input type="checkbox"/> Renal                     |
| <input type="checkbox"/> Ophthal                   | <input type="checkbox"/> Neurologic                |
| <input type="checkbox"/> Dental                    | <input type="checkbox"/> Muscular                  |
| <input type="checkbox"/> Cognitive                 | <input type="checkbox"/> Dermatologic              |
| <input type="checkbox"/> Psychological             | <input type="checkbox"/> 2 <sup>nd</sup> Malig     |
| <input type="checkbox"/> Endocrine                 | <input type="checkbox"/> Malig-2 <sup>nd</sup> Rel |
| <input type="checkbox"/> Malig-1 <sup>st</sup> Rel | <input type="checkbox"/> Ortho                     |

**Dx:**  
**Onset:**  
**Status:**

**Dx:**  
**Onset:**  
**Status:**

**Dx:**  
**Onset:**  
**Status:**

**Dx:**  
**Onset:**  
**Status:**

**New Concerns/Plan:**

**Labs Needed:**

**LTFU Visit Dates:**

**Date Form Completed:**



**Name:**

**-2B-**

**COMBINED CLINICAL SUMMARY AND H&P FORM  
INITIAL VISIT / NON-TRANSPLANT PATIENT**

*University of Michigan  
Ann Arbor, MI*

## Long-Term Follow-Up Clinical Summary

<i>Name:</i>	<i>Sex:</i>
<i>CPI #:</i>	<i>Race:</i>
<i>DOB:</i>	<i>Date of Dx:</i>
<i>Allergies:</i>	<i>Age at Dx:</i>
<i>Past medical history: Family history:</i>	Cancer in first degree relative:      Yes      No
	Cancer in second degree relative:      Yes      No

*Presenting symptoms and physical exam:*

*Diagnosis:*  
*Histology/morphology:*

Stage:	Marker Studies:
Metastatic Sites:	Chromosomes: Done?

*Initial workup:*

CBC:	WBC	Hgb	PLT	ESR	DIFF
Chem:	Creat	Alk Phos	LDH	AST	Ca
CSF:					
BM:					

*Radiologic tests done:*

*Surgery history:*

- 1.
- 2.
- 3.

*Treatment:*

First Protocol:

*Patient ID#*

Second Protocol:

*Patient ID#*

*Cumulative Drug Doses:*

Actinomycin	Ifosfamide
Adriamycin	L' Asparaginase
Ara-C	Methotrexate
(IT) Ara-C	(IT) Methotrexate
Bleomycin	Nitrogen mustard
CCNU/BCNU	*Other anthracycline
Carboplatin	Prednisone
Cisplatin	Procarbazine
Cyclophosphamide	6-MP
Daunomycin	6-TG
Decadron	Thiotepa
DTIC	Vinblastine
Etoposide	Vincristine
5 FU	VM-26

*Transfusions:*

Yes:

No:

*Radiation therapy:*

Site:

Dose:

*Complications:*

Neurologic?

Cardiac?

Pulmonary?

Endocrine?

Dental?

GI Tract?

Hepatic?

Renal?

Growth?

EENT?

Infectious (not F&N)?

Bone?

Muscle?

2<sup>nd</sup> Malignancy?

Skin?

*Date off therapy:*

*Number of hospitalizations off therapy:*

*Problems off therapy:*



Psychosocial:

Marital Status:

Pregnancies/ Offspring:

Insurance Status:

Health:

Life:

Special education:

Highest Level Education:

GPA:

Employed/Occupation:

**Psychosocial Functioning:**

*Problem List:*

- 1.
- 2.
- 3.
- 4.
- 5.

*Recommendations:*

- 1.
- 2.
- 3.
- 4.
- 5.

*Signature:* \_\_\_\_\_ *Date:* \_\_\_\_\_

**COMBINED CLINICAL SUMMARY AND H&P FORM  
INITIAL VISIT / TRANSPLANT PATIENT**

*University of Michigan  
Ann Arbor, MI*

**Long-Term Follow-Up Clinical Summary**

Name:

Sex:

CPI #:

Race:

DOB:

Date of Dx:

Allergies:

Age at Dx:

Past medical history: Family history: Cancer in first degree relative: Yes No

Cancer in second degree relative: Yes No

Presenting symptoms and physical exam:

Diagnosis:

Histology/morphology:

Stage:

Marker Studies:

Metastatic Sites:

Chromosomes: Done?

Initial workup:

CBC: WBC Hgb PLT ESR DIFF

Chem: Creat Alk Phos LDH AST Ca

CSF:

BM:

Radiologic tests done:

Surgery history:

1.

2.

3.

Treatment:

First Protocol:

Patient ID#

Second Protocol:

Patient ID#





**Psychosocial:**

Marital Status:

Special education:

Pregnancies/ Offspring:

Highest Level Education:

Insurance Status:

GPA:

Health:

Employed/Occupation:

Life:

**Psychosocial Functioning:**

**GVHD:** antibiotic prophylaxis   Y   N

Annual:

1. Opthy exam
2. Dental exam
3. Respiratory function
4. Gonadal function
5. Vaginal exam for females
6. Immunizations
7. DexaScan

*Problem List:*

- 1.
- 2.
- 3.
- 4.
- 5.

*Recommendations:*

- 1.
- 2.
- 3.
- 4.
- 5.

*Signature:* \_\_\_\_\_ *Date:* \_\_\_\_\_

**COMBINED H&P / PATIENT EDUCATION FORM  
SUBSEQUENT VISIT**

*University of Michigan  
Ann Arbor, MI*

**Subsequent Visit - Long-Term Follow-Up Clinic**

Name: \_\_\_\_\_ Age: \_\_\_\_\_  
CPI#: \_\_\_\_\_ Date: \_\_\_\_\_

Past Cancer History: \_\_\_\_\_

Problems/Issues from last year's visit: \_\_\_\_\_

Current interval history/concerns: \_\_\_\_\_

Current medications and doses: \_\_\_\_\_ Immunization Status: \_\_\_\_\_

Current MD's Name & Address: \_\_\_\_\_

Physical Exam: \_\_\_\_\_ Date: \_\_\_\_\_

Ht \_\_\_\_\_% \_\_\_\_\_ Wt \_\_\_\_\_% \_\_\_\_\_ BMI: \_\_\_\_\_ BP \_\_\_\_\_HR \_\_\_\_\_

Primary Tumor Site: \_\_\_\_\_

HEENT:

TANNER STAGE:

Cataracts: Yes No

SKIN:

FEMALES

Menarche: \_\_\_\_\_

Age: \_\_\_\_\_

CVS:

Regular: \_\_\_\_\_ Irregular \_\_\_\_\_

RESP:

Length of cycle: \_\_\_\_\_

Day of cycle: \_\_\_\_\_

EXAM OF TEETH:

Use of OCP's: Yes NO

YES NO

THYROID:

BREAST EXAM (f):

Tobacco: \_\_\_\_\_

ABD:

Alcohol: \_\_\_\_\_

MSK:

SCOLIOSIS EXAM: NL \_\_\_\_ ABNL \_\_\_\_

Seat Belt: \_\_\_\_

NEURO:

Bike Helmet: \_\_\_\_

Sunscreen \_\_\_\_

**Most recent diagnostic studies:**

- Echo:
- EKG:
- Holter:
- PFT's:
- HepC Status:
- HIV Status:
- CXR:
- *Mammogram:*
- *Audiogram:*

***Psychosocial:***

Marital Status:

Highest Level Education:

Pregnancies/Viable Offspring:

IEP:

Insurance Status:

Special education

Health: Y N

GPA:

Life: Y N

Employed/Occupation:

***Psychosocial functioning:***

***Current Problems/ Issues:***

1.

**Plan:**

- 1.
- 2.
- 3.
- 4.
- 5.

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

**PATIENT EDUCATION MATERIALS**

- Introduction to Long-Term Follow Up Care
- Childhood Cancer Survivors Book
  
- Avascular necrosis
- Bleomycin Alert
- Bone Health
- Breast Cancer
- Central Adrenal Insufficiency
- Dental Health
- Emotional Issues after Childhood Cancer
- Eye Problems
- Female Health Issues
- Finding Appropriate Healthcare
- Growth Hormone Deficiency
- Health Promotion through Diet and Exercise
- Hearing Problems
- Heart and Anthracyclines
- Heart and Radiation
- Hepatitis
- Hyperprolactinemia
- Hypopituitarism
- Kidney Health
- Limb Salvage
- Liver Health
- Male Health Issues
- Peripheral Neuropathy
  
- Precocious Puberty
- Pulmonary Health
- Raynaud's Phenomenon
- Reducing the Risk of Second Cancers
- School and Learning Issues
- Scoliosis and Kyphosis
- Single Kidney Precautions
- Skin Health
- Spleen Precautions
- Thyroid Problems
  
- Camp materials
- Scholarship Material
- Osteoporosis Guidelines
- Nutritional Resources
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

**COMBINED CLINICAL SUMMARY AND  
OFF-THERAPY EVALUATION TRACKING FORM**

***Children's Hospital of Philadelphia  
Philadelphia, PA***

## Cancer Survivorship Clinic - Clinical Summary

### Demographics

**Name:** \_\_\_\_\_ **Address:** \_\_\_\_\_  
**DOB:** \_\_\_\_\_ **Phone:** \_\_\_\_\_  
**MR#:** \_\_\_\_\_ **Parents Names:** \_\_\_\_\_  
**Sex:** \_\_\_\_\_  
**Race:** \_\_\_\_\_

### Diagnosis

**Diagnosis:** \_\_\_\_\_ **Histology/Pathology:** \_\_\_\_\_  
**Date of Dx:** \_\_\_\_\_ **Stage/Class:** \_\_\_\_\_  
**Age at Dx:** \_\_\_\_\_ **Metastatic Sites:** \_\_\_\_\_  
  
**Date off Tx:** \_\_\_\_\_ **Cytogenetics:** \_\_\_\_\_  
**Age off Tx:** \_\_\_\_\_ **Presenting Sx:** \_\_\_\_\_

**Family History of Cancer:**

### Medical Team

**Primary Oncologist:** \_\_\_\_\_ **Surgeon:** \_\_\_\_\_  
  
**Primary Physician:** \_\_\_\_\_ **Sub-specialists:** \_\_\_\_\_

### Chemotherapy History

**Initial BSA:**

Protocol	Reason	List of Drugs	Start Date	Stop Date
#1				
#2				
#3				

Drug	Cumulative Dose	Drug	Cumulative Dose	Drug	Cumulative Dose
Adriamycin	mg/m2	Cyclophosphamide	g/m2	Procarbazine	g/m2
Idarubicin	mg/m2	Ifosfamide	g/m2	Bleomycin	u/m2
Daunomycin	mg/m2	Cisplatin	mg/m2	HD MTX (>1g/m2)	g/m2
VP-16	g/m2	Carboplatin	mg/m2		

**Surgical History**

Date	Surgery	Surgeon

**Radiation History**

Date	Site	Dose

**Bone Marrow Transplant**

<b>Date:</b>	<b>Acute GVHD:</b>
<b>Type:</b>	<b>Chronic GVHD:</b>
<b>Prep Regime:</b>	

Agent	Cumulative Dose	Agent	Cumulative Dose
Melphalan	Mg/m <sup>2</sup> or kg		Mg/m <sup>2</sup> or kg
Cyclophosphamide	Mg/m <sup>2</sup> or kg		Mg/m <sup>2</sup> or kg
Busulfan	Mg/m <sup>2</sup> or kg		Mg/m <sup>2</sup> or kg

**Complications on Therapy**

<b>Neuropsych: Y/N</b>	<b>Renal: Y/N</b>	<b>Endocrine: Y/N</b>	<b>Dental: Y/N</b>
<b>Neurology: Y/N</b>	<b>GI/GU: Y/N</b>	<b>Growth: Y/N</b>	<b>Infections: Y/N</b>
<b>Pulmonary: Y/N</b>	<b>Hepatic: Y/N</b>	<b>Skin: Y/N</b>	<b>Nutrition: Y/N</b>
<b>Cardiac: Y/N</b>	<b>GYN: Y/N</b>	<b>Muscle/Bone: Y/N</b>	<b>SMN: Y/N</b>
<b>Vascular: Y/N</b>	<b>EENT: Y/N</b>	<b>Orthopedic: Y/N</b>	

### Complications off Therapy

<b>Neuropsych: Y/N</b>	<b>Renal: Y/N</b>	<b>Endocrine: Y/N</b>	<b>Dental: Y/N</b>
<b>Neurology: Y/N</b>	<b>GI/GU: Y/N</b>	<b>Growth: Y/N</b>	<b>Infections: Y/N</b>
<b>Pulmonary: Y/N</b>	<b>Hepatic: Y/N</b>	<b>Skin: Y/N</b>	<b>Nutrition: Y/N</b>
<b>Cardiac: Y/N</b>	<b>GYN: Y/N</b>	<b>Muscle/Bone: Y/N</b>	<b>SMN: Y/N</b>
<b>Vascular: Y/N</b>	<b>EENT: Y/N</b>	<b>Orthopedic: Y/N</b>	

### Education/Vocation/Career/Psychosocial Information

<b>Education:</b> <b>Grade Level:</b> <b>Special Ed:</b> <b>Resource:</b>	<b>OVR: Y/N</b> <b>Employment: Y/N</b> <b>Occupation:</b>	<b>Marital Status:</b> <b>Pregnancies:</b> <b>Offspring:</b>	
<b>Neuropsychology Testing:</b>			
<b>Date/Results</b>	<b>Date/Results</b>	<b>Date/Results</b>	
<b>Problem</b>	<b>Date of Evaluation/ Who?</b>	<b>Intervention</b>	<b>Last Follow-up</b>

**Review of Off-Therapy Evaluations**

<b>System</b>	<b>Test</b>	<b>Date</b>							
<u>Hearing/ Vision</u>	Audio								
	Optho								
<u>Endo</u>	T4/TSH								
	Somato-C								
	IGF-BP3								
	FSH/LH								
	Estro/Testost								
	Bone Age								
<u>Pulm</u>	PFT's								
<u>Cardiac</u>	Echo								
	EKG								
	Holter								
	Exc Stress								
	Lipids								
<u>Renal</u>	BUN/Cr								
	CrCl								
	BP								
<u>Heme</u>	CBC								
	ESR								
Chemisty									
<u>ID</u>	Hep C								
	HIV								
	Flu Vaccine								
	Pneumo vax								
	Mening ovax								
	HIB								
	PCN Prophyl								
<u>Radiology</u>	CXR								
	CT/MR/US								
	DEXA/PQCT								

## **H & P FORM**

***City of Hope  
Duarte, CA***



**City of Hope National Medical Center Survivorship Clinic**  
*Providing Specialized Follow-Up Care for Survivors of Pediatric Malignancies*

Annual History & Physical - Date: \_\_\_\_\_

Primary dx:		Dx date:		Off therapy date:			
Interval medical hx:							
Interval family hx:			Interval social hx:				
Interval immunization hx:							
Current medications:				Allergies:			
<b>Review of systems:</b>							
	NL	ABN	Describe abnormal findings		NL	ABN	Describe abnormal findings
Constitutional	<input type="checkbox"/>	<input type="checkbox"/>	_____	Gastrointestinal	<input type="checkbox"/>	<input type="checkbox"/>	_____
Integumentary	<input type="checkbox"/>	<input type="checkbox"/>	_____	Genitourinary	<input type="checkbox"/>	<input type="checkbox"/>	_____
Hematologic	<input type="checkbox"/>	<input type="checkbox"/>	_____	Females: Menarche	_____	LMP	_____ Cycle/flow _____
HEENT	<input type="checkbox"/>	<input type="checkbox"/>	_____	Musculoskeletal	<input type="checkbox"/>	<input type="checkbox"/>	_____
Cardiovascular	<input type="checkbox"/>	<input type="checkbox"/>	_____	Neurologic	<input type="checkbox"/>	<input type="checkbox"/>	_____
Respiratory	<input type="checkbox"/>	<input type="checkbox"/>	_____	Psychologic	<input type="checkbox"/>	<input type="checkbox"/>	_____
<b>Physical Examination:</b>							
Temp _____		HR _____		RR _____		BP _____	
		Ht _____ cm		Wt _____ kg			
Age <16 yrs: Ht% _____		Wt% _____		Age ≥16 yrs: BMI _____		Hx trunk radiation: Sitting Ht _____ cm	
	NL	ABN	NE	Describe abnormal findings			
General	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____			
Hair/nails	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____			
Skin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____			
Lymph Nodes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____			
HEENT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____			
Dentition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____			
Hearing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____			
Vision	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____			
Neck/thyroid	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____			
Cardiovascular	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____			
Chest/lungs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____			
Breasts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____			
Abdomen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____			
Genitalia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____			
Tanner stage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	I II III IV V	Testicular volume: R _____ cc L _____ cc		
Back	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____			
Extremities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____			
Neurologic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____			
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____			
Examiner's signature: _____							

**Annual History & Physical (continued)**

**Diagnostic Evaluation (labs, radiology, diagnostics):**

**Assessment:**

**Plan:**

Diagnostics:

Education:

Referrals:

Return visit:

## **H & P FORM - TRANSPLANT**

***Helen DeVos Children's Hospital  
Grand Rapids, MI***

**PEDIATRIC BLOOD & BONE MARROW TRANSPLANTATION  
AFTER-CARE AND TRANSITION (ACT) CLINIC**



Patient: \_\_\_\_\_ MR#: \_\_\_\_\_ DOT: \_\_\_\_\_

Vital Signs: B/P: \_\_\_\_\_ HR: \_\_\_\_\_ RR: \_\_\_\_\_ T: \_\_\_\_\_  
Hgt: \_\_\_\_\_ cm/in Wgt: \_\_\_\_\_ kg/lbs O<sub>2</sub> Sats: \_\_\_\_\_ %

General Health:  Recent PCP office visits? \_\_\_\_\_  
 Recent subspecialty office visits? \_\_\_\_\_  
 Dental? \_\_\_\_\_  
 Ophthalmology? \_\_\_\_\_

Flu Vaccination:  yes \_\_\_\_\_ year  no

Medications: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Recent Family History: \_\_\_\_\_  
(malignancies, deceased, etc)  
\_\_\_\_\_  
\_\_\_\_\_

Psychosocial: School: \_\_\_\_\_  
grade: \_\_\_\_\_ grades: \_\_\_\_\_ Resource help? IEP? \_\_\_\_\_  
time spent on TV/media/video games: \_\_\_\_\_

Extracurricular activities: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Hobbies: \_\_\_\_\_  
Living conditions: \_\_\_\_\_

Parents:  married  divorced  separated  
Sibs: \_\_\_\_\_ (full \_\_\_\_\_, half \_\_\_\_\_, step \_\_\_\_\_)

REVIEW OF SYSTEMS:		yes	no	other
General	excessive weight gain/loss			
	fatigue			
	malaise			
	sleeping pattern			
Skin	rash			
	dry skin			
	bruises			
	new moles or changes in mole size/color			
	central line history			

REVIEW OF SYSTEMS (con't):		yes	no	other
<b>Head</b>	chronic headaches, migraines, etc.			
	thin hair growth			
	alopecia			
<b>Eyes</b>	blurred/double vision			
	glasses			
	dry eyes			
<b>Ears</b>	tinnitus			
	loss of hearing			
	chronic otitis media			
<b>Nose</b>	epistaxis			
	chronic rhinorrhea			
	chronic congestion			
<b>Mouth/Throat</b>	excessive dental caries			
	gum bleeding			
	mucosal ulcers			
	dry mouth			
	sore throat			
	odynophagia			
	other:			
<b>Neck</b>	swelling			
	stiffness			
<b>Lungs</b>	cough			
	exercise-induced cough			
	resting shortness of breath			
	dyspnea w/ exertion			
	orthopnea			
	hemoptysis			
	other:			
<b>Cardiovascular</b>	chest pain			
	exercise stamina			
	extremity swelling			
	extremity cyanosis			
<b>Abdomen</b>	appetite			
	nutrition			
	nausea/emesis			
	bloating			
	cramping			
	diarrhea			
<b>G/U</b> ♂	rectal bleeding			
	testicular/scrotal swelling			
	testicular self exam			
	early a.m. erection			
	sexual arousal			
	sexually active			
<b>G/U</b> ♀	SBE			
	menses			
	sexually active			
	prophylaxis			
<b>Musculoskeletal</b>	joint pain			
	decreased ROM			
	myalgias			
<b>Neurological</b>	paresis			
	dizzy			
	syncope			
	falls			
	paresthesia			

**PSYCHOSOCIAL ASSESSMENT FORM  
(SOCIAL WORK)**

*University of Michigan  
Ann Arbor, MI*

## Medical Social Work Psychosocial Assessment

### Identifying Information/Presenting Problem:

### Patient History:

### Abuse/Violence:

### Substance Use/Abuse:

### Family/Social Support:

Family genogram:

Family functioning/sibling relationships:

Memory/meaning of treatment (patient/parent):

Meaning/significance of cancer/survivorship:

Emotional coping/treatment, if any:

Spiritual/faith support:

School/academic functioning:

Special Ed services:

Extracurricular activities/sports:

Relationships: friends/significant others:

Recreational pursuits:

### Awareness/concern with Late Effects:

### FINANCIAL/INSURANCE:

### Clinical Assessment:

### Intervention/Education:

### Discharge Plan/Treatment plan:

## **NUTRITION ASSESSMENT FORM**

*University of Michigan*  
*Ann Arbor, MI*

***Nutrition Assessment  
Pediatric Oncology/Long Term Follow UP Clinic***

Name: \_\_\_\_\_ Date: \_\_\_\_\_

CPI# \_\_\_\_\_

Diagnosis: \_\_\_\_\_ Date of diagnosis: \_\_\_\_\_

Treatment: \_\_\_\_\_

Medications: \_\_\_\_\_

Supplements: \_\_\_\_\_

**Anthropometrics**

Weight: \_\_\_\_\_ kg \_\_\_\_\_ # \_\_\_\_\_ %ile

Usual Body Weight \_\_\_\_\_ %UBW

Ideal Body Weight \_\_\_\_\_ %IBW

Height: \_\_\_\_\_ cm \_\_\_\_\_ %ile

BMI: \_\_\_\_\_

Weight/height /growth: \_\_\_\_\_

**Food Intake Information/Diet History**

Appetite (circle one): poor fair good excellent

Food Allergies/Intolerances? Yes \_\_\_\_\_  
No \_\_\_\_\_

**Lifestyle Factors:**

Exercise? Yes \_\_\_\_\_ No \_\_\_\_\_

Smoking? Yes \_\_\_\_\_ No \_\_\_\_\_

Alcohol? Yes \_\_\_\_\_ No \_\_\_\_\_

Social History:

**Patient/Family Nutrition Concerns:** \_\_\_\_\_

**Diet History:**

Breakfast

Lunch

Dinner

Snack

Snack

Snack

**Assessment**

Patient is: (circle one)      maintaining,      decreasing,      gaining      weight.  
Patient is: (circle one)      maintaining,      growing      in height.

Current diet appears:

Well balanced

Lacking in:    calcium    calories    protein    fat    fiber    iron

Excessive in:    calories    fat    sugar    salt    fast food

**Written patient education provided:**

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

**Recommendations:**

1. \_\_\_\_\_  
\_\_\_\_\_
2. \_\_\_\_\_

\_\_\_\_\_ **Pediatric Oncology Registered Dietitian**

## **PSYCHOLOGY ASSESSMENT FORM**

*City of Hope*  
*Duarte, CA*



**City of Hope National Medical Center Survivorship Clinic**  
*Providing Specialized Follow-Up Care for Survivors of Pediatric Malignancies*

**PSYCHOLOGY NOTES**

Date: «DATE» Psychologist: \_\_\_\_\_ Translator Present: Yes \_\_\_ No \_\_\_

Name: «FIRST NM» «LAST NM» MR#: «MEDREC» DOB: «DOB» Age: \_\_\_\_\_

Dx: «DX» Date of Dx: «DXDATE» Treatment Course: \_\_\_\_\_

Cranial Irradiation: Yes \_\_\_ No \_\_\_ Dose of Irradiation: \_\_\_\_\_ Age of Irradiation \_\_\_\_\_

Intrathecal Medication: Yes \_\_\_ No \_\_\_ Medication: \_\_\_\_\_ Age of Medication \_\_\_\_\_

**SOCIAL HISTORY**

Resides with: \_\_\_\_\_

Marital Status: Single \_\_\_ Married \_\_\_ Divorced \_\_\_ Separated \_\_\_ Widowed \_\_\_ Partnered \_\_\_

**SCHOOL HISTORY**

Grade: \_\_\_\_\_ GPA: \_\_\_\_\_ Special Ed. Classes \_\_\_ Regular Classes \_\_\_\_\_ Accelerated Classes \_\_\_\_\_

**WORK HISTORY**

Highest Level of Education Completed: \_\_\_\_\_ Profession: \_\_\_\_\_

Currently: Employed \_\_\_\_\_ Unemployed \_\_\_\_\_ Other: \_\_\_\_\_

Number of Jobs Held in Past Five Years: \_\_\_\_\_

**BEHAVIORAL OBSERVATIONS**

**Present at Appointment:** Patient \_\_\_ Parent \_\_\_ Sig. Other \_\_\_ Sibling \_\_\_ Other \_\_\_

**Appearance:** Neatly Groomed \_\_\_ Neatly Dressed \_\_\_ Disheveled \_\_\_ Casually Dressed \_\_\_

**Behavior:** Friendly \_\_\_ Cooperative \_\_\_ Outgoing \_\_\_ Guarded \_\_\_ Reserved \_\_\_

**Affect:** Appropriate \_\_\_ Inappropriate \_\_\_ to Thought and Content

**Mood:** Euthymic \_\_\_ Dysthymic \_\_\_ Anxious \_\_\_ Angry \_\_\_

**Understanding of Dx and Tx:** Poor \_\_\_ Good \_\_\_ Well-Informed \_\_\_

**Thought Process:** Intact \_\_\_\_\_ Not Intact \_\_\_\_\_

**Intelligence:** Below Average \_\_\_\_\_ Average \_\_\_\_\_ Above Average \_\_\_\_\_

**Speech:** Slow \_\_\_\_\_ Normal \_\_\_\_\_ Rapid \_\_\_\_\_ Loud \_\_\_\_\_ Soft \_\_\_\_\_ Stuttering \_\_\_\_\_

**Comments re: Behavioral Observations** \_\_\_\_\_

**ISSUES ADDRESSED**

**Introduction to Psychology Services available to Survivors of Childhood Cancer**

**NEUROPSYCHOLOGICAL LATE-EFFECTS**

(Please indicate below the nature of the reported difficulties, as well as duration of said difficulties, and any intervention utilized including tutoring, RSP, IEP, etc.)

**Learning Difficulties:** \_\_\_\_\_

**Information Processing Difficulties:** \_\_\_\_\_

**Attention/Concentration Problems:** \_\_\_\_\_

**Memory Difficulties:** \_\_\_\_\_

**Comments :** \_\_\_\_\_

**MENTAL HEALTH ISSUES**

Are you currently seeing a Counselor, Psychotherapist, or a Psychiatrist? \_\_\_\_\_

Current Psychotropic Medications: \_\_\_\_\_

Please ask the patient to rate his or her feelings in the following domain over the past few weeks. Please *check* all symptoms that apply at this time. (You do not have to rate the severity of each symptom)

**Anxiety:**

- Nervousness/Shakiness inside
  - Feeling tense or keyed up
  - Suddenly scared for no reason
  - Spells of terror or panic
  - Feeling so restless you can't sit still
  - Feeling fearful
- \_\_\_\_\_ Rating from 1 to 10

**Depression:**

- Feeling no interest in things
  - Feeling Lonely
  - Feeling Blue
  - Feelings of Worthlessness
  - Feeling hopeless about your future
  - Thoughts of ending your life
- \_\_\_\_\_ Rating from 1-10

**Anger:**

- Short-tempered/Impatient
  - Tension in body
  - Physical Outbursts
  - Verbal Outbursts
  - Easily Frustrated/Irritated
  - Oppositional Defiant
- \_\_\_\_\_ Rating from 1 to 10

**PTSD:**

- Recurrent/Intrusive Recollections
  - Recurrent Distressing Dreams
  - Acting/Feeling Event is Recurring
  - Psychological Distress at Cue Exposure
  - Physiological Distress at Cue Exposure
  - Avoid Associated Thoughts/Feelings
  - Avoid Associated People/Places/Activities
  - Can't Recall Important Aspect of Trauma
  - Diminished Interest in Activities
  - Detachment/Estrangement from Others
  - Restricted Range of Affect
  - Sense of Foreshortened Future
  - Difficulty Falling/Staying Asleep
  - Irritability/Outbursts of Anger
  - Difficulty Concentrating
  - Hypervigilance
  - Exaggerated Startle Response
- \_\_\_\_\_ Rating from 1 to 10

Comments : \_\_\_\_\_

**SOCIAL SUPPORT** (please assess this patients access and utilization of the following social support sources)

Relationship with Parents: \_\_\_\_\_

\_\_\_\_\_

Relationship with Siblings: \_\_\_\_\_

\_\_\_\_\_

Relationship with Significant Other: \_\_\_\_\_

Relationship with Peers: \_\_\_\_\_

Relationship with Co-Workers: \_\_\_\_\_

**CURRENT STRESSORS**

Work-Related Difficulties: \_\_\_\_\_

School-Performance Difficulties: \_\_\_\_\_

Other Stressors: \_\_\_\_\_

**RECOMMENDATIONS/FOLLOW-UP NEEDED**

- No Psychology services needed at this time. Follow-up at next annual clinic
- Referral to Psychologist for evaluation and follow-up if indicated
- Referral for Psychiatric Evaluation
- Referral to School Reintegration Program
- Referral for Neuropsychological Testing

Date: \_\_\_\_\_ Psychologist Signature: \_\_\_\_\_

Date: \_\_\_\_\_ Psychology Intern Signature: \_\_\_\_\_

## **PATIENT EDUCATION/HEALTH LINKS FORM**

***Carolinas Medical Center  
Charlotte, NC***

**PATIENT EDUCATION/HEALTH LINKS FORM**

*Documentation of Educational Information*

**Health Link Brochures**

**Date Reviewed and given to patient**

<i>Avascular Necrosis</i>	_____
<i>Bladder Health</i>	_____
<i>Bleomycin Alert</i>	_____
<i>Bone Health</i>	_____
<i>Breast Cancer</i>	_____
<i>Breast Cancer: Are you at Risk?</i>	_____
<i>Central Adrenal Insufficiency</i>	_____
<i>Colorectal Cancer</i>	_____
<i>Dental Health</i>	_____
<i>Emotional Issues</i>	_____
<i>Eye Problems</i>	_____
<i>Female Health Issues</i>	_____
<i>GI Health</i>	_____
<i>Growth hormone deficiency</i>	_____
<i>Health Promotion</i>	_____
<i>Hearing Problems</i>	_____
<i>Heart and Anthracyclines</i>	_____
<i>Heart and Radiation</i>	_____
<i>Hepatitis</i>	_____
<i>Hepatitis</i>	_____
<i>Hyperprolactinemia</i>	_____
<i>Hypopituitarism</i>	_____
<i>Intro. To LTFU after Treatment</i>	_____
<i>Kidney Health</i>	_____
<i>Limb Salvage</i>	_____
<i>Liver Health</i>	_____
<i>Male Health Issues</i>	_____
<i>Pain</i>	_____
<i>Peripheral Neuropathy</i>	_____
<i>Precocious Puberty</i>	_____
<i>Pulmonary Health</i>	_____
<i>Raynaud's Phenomena</i>	_____
<i>Reducing Risk of Secondary Ca</i>	_____
<i>School and Learning Issues</i>	_____
<i>Scoliosis</i>	_____
<i>Single Kidney</i>	_____
<i>Skin Health</i>	_____
<i>Spleen</i>	_____
<i>Splenic Precautions</i>	_____
<i>Thyroid Problems</i>	_____

**Other Educational Information**

*Cancer Survivor Summary*

*Self-Breast Exam*

*Sun Safety*

*Testicular Self exam*

*Tobacco Education/Cessation*

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Letters**

*To patient*

*To PCP*

*To other specialist*

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

# QUESTIONNAIRES

## BASELINE QUESTIONNAIRE (ENGLISH AND SPANISH)

*Cook Children's Hospital  
Fort Worth, TX*

**Life After Cancer Program**

Date of Visit: \_\_\_\_\_

\*\*Please complete this form while you are waiting for the physician or nurse practitioner. Your concerns will be addressed during your visit with the LACP.

Patients Name: \_\_\_\_\_ Date of Birth: \_\_\_\_\_

Address: \_\_\_\_\_ Diagnosis: \_\_\_\_\_

\_\_\_\_\_ Phone #: \_\_\_\_\_

\_\_\_\_\_ Alternate Phone #: \_\_\_\_\_

Whose phone number is the alternate #? \_\_\_\_\_

Please list all the people living in the patient's house:

Name:	Age	Relation to Patient
-------	-----	---------------------

_____	_____	_____
-------	-------	-------

_____	_____	_____
-------	-------	-------

_____	_____	_____
-------	-------	-------

Are you attending College Y/N \_\_\_\_\_ If No, address the barriers to your attending college, if any: \_\_\_\_\_

Are you married Y/N \_\_\_\_\_ Are you pregnant? Y/N \_\_\_\_\_

Do you have children Y/N \_\_\_\_\_ Problems: \_\_\_\_\_

Who is employed in the household:

Name:	Place of Employment
-------	---------------------

_____	_____
-------	-------

_____	_____
-------	-------

What is your medical insurance: \_\_\_\_\_

Concerns about your coverage: \_\_\_\_\_

\_\_\_\_\_

Life Insurance : \_\_\_\_\_

Concerns: \_\_\_\_\_

Primary care physician: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Phone #: \_\_\_\_\_ Date Last Seen: \_\_\_\_\_

Problems: \_\_\_\_\_

\_\_\_\_\_

Over ↻

Continued:

Please circle any concerns or problems you (your child) may be experiencing. \*\*Children over age of 15 years of age should complete this section individually also.

Vision      Hearing      Speech      Dental      Eating/swallowing      Weight  
Growth      Skin      Exercise Tolerance      Fatigue (tired)      Sleep  
Breathing      Nausea/Vomiting      Bowel habits      Urination      School  
Relations with family      Self Esteem      Depression      Relations with friends  
Behaviors      Lack of interest in normal activities

What are your biggest fears? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

How has having cancer affected your life? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

What positive thing has come about of your cancer experience? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

List your three (3) biggest concerns NOW:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

What can the Life After Cancer Program and Cook Children's Medical Center do to improve your life? \_\_\_\_\_  
\_\_\_\_\_

Do you have any ill feelings (being anxious) about coming back to this clinic?      Yes/NO

If Yes, What type of setting would you feel more comfortable in coming back to?

Form Completed by \_\_\_\_\_ / \_\_\_\_\_

**Programa de la Vida Despues de Cáncer**

Fecha de visita: \_\_\_\_\_

\*\* Favor de completar este formulario mientras está esperando al médico o a la enfermera. Se contestarán sus dudas durante su visita con el LACP.

Nombre del paciente: \_\_\_\_\_ Fecha de nacimiento: \_\_\_\_\_

Dirección: \_\_\_\_\_ Diagnóstico: \_\_\_\_\_

\_\_\_\_\_ # de teléfono: \_\_\_\_\_

\_\_\_\_\_ # de teléfono alternativo: \_\_\_\_\_

¿De quién # es el teléfono alternativo? \_\_\_\_\_

Favor de listar todas las personas quienes viven en la casa con el paciente:

Nombre	Edad	Parentesco al Paciente
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Quien en la casa está empleado:

Nombre	Lugar de Empleo
_____	_____
_____	_____
_____	_____

Indique por favor cuál de las preguntas siguientes aplica al paciente.

¿Es usted ir a la universidad? Sí No Si no, ¿problemas con ir a la universidad? \_\_\_\_\_

¿Usted está casado? Sí No ¿Usted está encinta? Sí No

¿Usted tiene niños? Sí No ¿Problemas? \_\_\_\_\_

Con quien tiene aseguranza médica: \_\_\_\_\_

Preocupaciones sobre su cobertura: \_\_\_\_\_

\_\_\_\_\_

Aseguranza de vida: \_\_\_\_\_

Preocupaciones: \_\_\_\_\_

Pediatra Particular: \_\_\_\_\_

Dirección: \_\_\_\_\_

\_\_\_\_\_

# de teléfono: \_\_\_\_\_ Fecha de su última visita: \_\_\_\_\_

Problemas: \_\_\_\_\_

\_\_\_\_\_

al otro lado ☺

Favor de hacer un círculo alrededor de las dudas o problemas que usted o su hijo está experimentando.  
\*\* Niños mayores de 15 años deben completar esta sección individualmente también.

Visión	Sentido de Oír	Habla	Dental	Comer/Tragar	Peso
Crecimiento	Piel	Tolera bien ejercicio		Fatiga (muy cansado)	Dormir
Respirar	Nausea/Vómitos	Habitos de Ecrementos		Orinación	Escuela
Relaciones Familiares		Self Esteem	Depresión	Relaciones con amigos	
Comportamiento		Falta de interés en actividades normales			

¿Cuáles son sus mayores terrores? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

¿Cómo le ha afectado su vida el tener cáncer? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

¿Qué cosa positiva ha salido de su experiencia con cáncer? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Liste sus preocupaciones más grandes AHORA:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

¿Qué pueden hacer el Life After Cancer Program y Cook Children's Medical Center para mejorar su vida?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Formulario Completado por \_\_\_\_\_ / \_\_\_\_\_

**COMBINED ANNUAL QUESTIONNAIRE  
WITH H&P, PATIENT EDUCATION,  
AND FAMILY/PREGNANCY HISTORY FORMS**

***St. Jude Children's Research Hospital  
Memphis, TN***

Form 409  
 St. Jude Children's Research Hospital  
 332 N. Lauderdale St.  
 Memphis, Tennessee 38105-2794  
 Rev.9/03

PI: Melissa Hudson, M.D.  
 ACT Annual Questionnaire  
 Rev. 9/03

Page 1 of 10

Date \_\_\_\_\_

**ACT ANNUAL QUESTIONNAIRE**

**DEMOGRAPHIC INFORMATION**

Date: \_\_\_\_\_

<p><b>Current Home Address:</b></p> <p>Name: _____</p> <p>Street: _____</p> <p>City/State/Zip: _____</p> <p>Home Phone: _____</p> <p>Work Phone: _____</p> <p>Cell Phone: _____</p> <p>e-mail: _____</p> <p><b>Primary Care Physician:</b></p> <p>Name: _____</p> <p>Street: _____</p> <p>City/State/Zip: _____</p> <p>Phone: _____</p>	<p><b>Alternate Emergency Contact:</b></p> <p>Name: _____</p> <p>Relationship to patient: _____</p> <p>Street: _____</p> <p>City/State/Zip: _____</p> <p>Phone: _____</p> <p><b>Specialty Physician:</b></p> <p>Name: _____</p> <p>Street: _____</p> <p>City/State/Zip: _____</p> <p>Phone: _____</p>
---	---

**INTERVAL HISTORY**

**Medical Check-Ups:**

1. Have you seen a doctor since your last St. Jude visit?  Yes  No

2. Reason for doctor visit:

Routine check-up; sports or school physical  Illness; indicate approximate date and condition treated

Date: \_\_\_/\_\_\_/\_\_\_; Hospital: \_\_\_\_\_

Medical problem: \_\_\_\_\_

\_\_\_\_\_

Date: \_\_\_/\_\_\_/\_\_\_; Hospital: \_\_\_\_\_

Medical problem: \_\_\_\_\_

\_\_\_\_\_

Date: \_\_\_/\_\_\_/\_\_\_; Hospital: \_\_\_\_\_

Medical problem: \_\_\_\_\_

\_\_\_\_\_

**Hospitalizations**

3. Have you been hospitalized since your last St. Jude visit?  Yes  No

Indicate approximate date and condition treated:

Date: \_\_\_/\_\_\_/\_\_\_; Hospital: \_\_\_\_\_

Medical problem: \_\_\_\_\_

\_\_\_\_\_

Date: \_\_\_/\_\_\_/\_\_\_; Hospital: \_\_\_\_\_

Medical problem: \_\_\_\_\_

\_\_\_\_\_

Form 409  
 St. Jude Children's Research Hospital  
 332 N. Lauderdale St.  
 Memphis, Tennessee 38105-2794  
 Rev. 9/03

PI: Melissa Hudson, M.D.  
 ACT Annual Questionnaire  
 Rev. 9/03  
 Page 2 of 10

Date \_\_\_\_\_

**MEDICATIONS AND HEALTH SUPPLEMENTS**

**Medications:** List the medicines you take regularly. Remember to include hormones, birth control pills and over the counter medicines.

Name of medicine	Dose of medicine	Reason taken	Prescribing MD

**Health Supplements:** List herbs, supplements and other natural products you take regularly

Name of product	Reason taken

**CURRENT HEALTH PROBLEMS**

Please check if you are **currently having chronic problems** with any of the conditions below:

	<u>Clinician Comments</u>
<input type="checkbox"/> Frequent headaches <input type="checkbox"/> Problems seeing <input type="checkbox"/> Problems hearing <input type="checkbox"/> Dizziness or unsteadiness <input type="checkbox"/> Problems walking <input type="checkbox"/> Frequently tired <input type="checkbox"/> Changes in appetite or eating habits <input type="checkbox"/> Sensitivity to heat or cold <input type="checkbox"/> Chest pain <input type="checkbox"/> Rapid or irregular heartbeat <input type="checkbox"/> Frequent or severe belly pain <input type="checkbox"/> Frequent constipation <input type="checkbox"/> Frequent diarrhea <input type="checkbox"/> Frequent need to urinate <input type="checkbox"/> Burning or pain with urination <input type="checkbox"/> Back pain <input type="checkbox"/> Any other chronic pain <input type="checkbox"/> Problems with menstrual periods <ul style="list-style-type: none"> <li><input type="checkbox"/> Heavy periods with excessive bleeding</li> <li><input type="checkbox"/> Irregular or frequently missed periods</li> <li><input type="checkbox"/> Severe cramping</li> </ul> <input type="checkbox"/> Problems with sexual functioning <input type="checkbox"/> Problems with memory, thinking, forgetting <input type="checkbox"/> Problems controlling temper or anger <input type="checkbox"/> Difficulty getting along with others <input type="checkbox"/> Increased worries or upsetting thoughts <input type="checkbox"/> Problems with anxiety/panic attacks <input type="checkbox"/> Frequently feeling sad, blue or depressed <input type="checkbox"/> Problems sleeping or frequent use of sleep medicines <input type="checkbox"/> Increased use of tobacco, alcohol or other drugs <input type="checkbox"/> Use of over the counter weight loss medicine	

Form 409  
 St. Jude Children's Research Hospital  
 332 N. Lauderdale St.  
 Memphis, Tennessee 38105-2794  
 Rev. 9/03

PI: Melissa Hudson, M.D.  
 ACT Annual Questionnaire  
 Rev. 9/03  
 Page 3 of 10

Date \_\_\_\_\_

**REPRODUCTIVE STATUS**

Date: \_\_\_\_\_

**FAMILY HISTORY UPDATE**

**1. Have any close relatives died since your last visit?**

Family member	Age at death	Cause of death

**2. Have any close relatives developed cancer since your last clinic visit?**

Family member	Age at diagnosis	Type or location of cancer	Health status

**For males and females: Have you had a child since your last St. Jude visit? Indicate details below:**

No.	Pregnancy outcome	Type of delivery	Length of pregnancy	Sex	Birth weight
1	Date: ___/___/___ <input type="checkbox"/> Live birth <input type="checkbox"/> Stillbirth <input type="checkbox"/> Miscarriage <input type="checkbox"/> Medical abortion	<input type="checkbox"/> Vaginal <input type="checkbox"/> C-section	Weeks pregnant: _____ <input type="checkbox"/> Pre-term (< 37 weeks) <input type="checkbox"/> Full-term ( 37- 42 weeks) <input type="checkbox"/> Post-term (> 42 weeks)	<input type="checkbox"/> F <input type="checkbox"/> M	_____lbs _____oz Name: _____
2	Date: ___/___/___ <input type="checkbox"/> Live birth <input type="checkbox"/> Stillbirth <input type="checkbox"/> Miscarriage <input type="checkbox"/> Medical abortion	<input type="checkbox"/> Vaginal <input type="checkbox"/> C-section	Weeks pregnant: _____ <input type="checkbox"/> Pre-term (< 37 weeks) <input type="checkbox"/> Full-term ( 37- 42 weeks) <input type="checkbox"/> Post-term (> 42 weeks)	<input type="checkbox"/> F <input type="checkbox"/> M	_____lbs _____oz Name: _____

**For females only:**

<p>1. Have you ever had a menstrual period naturally, without hormones or medications? <input type="checkbox"/> No <input type="checkbox"/> Yes Age at first period: _____                      Approximate date of last menstrual period: _____</p> <p>2. Which best describes you? Check one:  <input type="checkbox"/> I <b>am</b> having <b>regular</b> periods.  <input type="checkbox"/> I <b>am</b> having <b>irregular</b> periods.  <input type="checkbox"/> I <b>am</b> currently pregnant. Months pregnant : _____  <input type="checkbox"/> I <b>am</b> not having menstrual periods.</p> <p>3. Which best describes you? Check one:  <input type="checkbox"/> I <b>am not</b> taking female hormones or birth control pills.  <input type="checkbox"/> I <b>am</b> taking birth control pills to prevent a pregnancy.  <input type="checkbox"/> I <b>am</b> taking birth control pills for severe cramps.  <input type="checkbox"/> I <b>am</b> taking female hormones or birth control pills to regulate my periods.  <input type="checkbox"/> I <b>am</b> taking female hormones or birth control pills for ovarian failure or menopause.</p>	<p>4. If you have stopped having periods, what caused your periods to stop?  <input type="checkbox"/> Pregnancy  <input type="checkbox"/> Menopause; approximate date: ___/___/___; or age: _____  <input type="checkbox"/> Surgery (e.g., removal of uterus); date: ___/___/___                      Type of surgery: _____  <input type="checkbox"/> Other; specify: _____  <input type="checkbox"/> Don't know reason</p> <p>5. Do you examine your breasts every month?  <input type="checkbox"/> Almost always  <input type="checkbox"/> Sometimes  <input type="checkbox"/> Rarely  <input type="checkbox"/> Almost never</p> <p>6). Have you had a pelvic exam, PAP smear or breast exam in the last year?  <input type="checkbox"/> No  <input type="checkbox"/> Yes</p> <p>Results: _____</p>
--	--

Form 409  
 St. Jude Children's Research Hospital  
 332 N. Lauderdale St.  
 Memphis, Tennessee 38105-2794  
 Rev. 9/03

PI: Melissa Hudson, M.D.  
 ACT Annual Questionnaire  
 Rev. 9/03  
 Page 4 of 10

Date \_\_\_\_\_

**PSYCHOSOCIAL HISTORY**

<p><b>Marital status and living arrangements</b></p> <p>1. Indicate your current marital status:  <input type="checkbox"/> Single <input type="checkbox"/> Married <input type="checkbox"/> Living as married <input type="checkbox"/> Widowed  <input type="checkbox"/> Divorced <input type="checkbox"/> Separated or no longer living as married</p> <p>2. Indicate with whom you currently live:  <input type="checkbox"/> parents, step-parents, adult guardian  <input type="checkbox"/> other family members  <input type="checkbox"/> spouse or significant other  <input type="checkbox"/> roommate(s)  <input type="checkbox"/> housing facility  <input type="checkbox"/> I live alone  <input type="checkbox"/> other: _____</p> <p>3. Have you had a change in custody since your last St. Jude visit?          Specify: _____</p>	<p><b>School history</b></p> <p>1. Are you currently enrolled in school? <input type="checkbox"/> Yes <input type="checkbox"/> No          Indicate grade level: _____ What is your grade average: _____</p> <p>2. Indicate the highest grade completed in school:  <input type="checkbox"/> 1 - 8 years (grade school); grade: _____  <input type="checkbox"/> 9 -12 years (high school); did not graduate: grade: _____  <input type="checkbox"/> Graduated from high school; year of graduation: _____  <input type="checkbox"/> Did not graduate, but obtained GED certificate  <input type="checkbox"/> Training after high school, other than college  <input type="checkbox"/> Some college; did not graduate; number of years: _____  <input type="checkbox"/> Graduated from college; year of graduation: _____  <input type="checkbox"/> Postgraduate education; specify: _____</p> <p>3. Check if you are having any of the following problems in school:  <input type="checkbox"/> Need for tutoring?  <input type="checkbox"/> Need for resource/special education services?  <input type="checkbox"/> Need to repeat grade(s)?  <input type="checkbox"/> Behavioral problems affecting school performance?</p>
<p><b>Employment and insurance</b></p> <p>1. Are you working? <input type="checkbox"/> Yes <input type="checkbox"/> No          If yes, <input type="checkbox"/> Full-time <input type="checkbox"/> Part-time</p> <p>2. How long have you been at your present job? _____ years          Occupation: _____</p> <p>3. If you are unemployed, reason you are not working?          _____</p> <p>4. Do you have health insurance? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>5. How is the insurance provided? Check all that apply.  <input type="checkbox"/> Through your job.  <input type="checkbox"/> Through a spouse's or parent's policy.  <input type="checkbox"/> Through a policy you have purchased yourself.  <input type="checkbox"/> Medicaid or other public assistance program.  <input type="checkbox"/> Military dependent or veteran's benefits.  <input type="checkbox"/> Other; specify: _____</p> <p>6. Is your insurance through a managed care health plan, such as an HMO (health maintenance organization) or PPO (preferred provider organization)? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>7. Have you ever been denied insurance because of your cancer history or poor health? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>8. Have you ever been unable to afford insurance because of your cancer history? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>9. Have you been unable to afford insurance premiums that were higher because of your cancer history? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>10. Are there any limits or restrictions on any of your health plans due to any physical or mental health condition you had before the insurance went into effect? (pre-existing condition clause)  <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>11. In the past 12 months, did you experience difficulty or a delay in obtaining any type of health care  <input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p><b>Personal health</b></p> <p>Circle the number that best describes how you feel about the following statements.</p> <p>1. I feel that my doctors and nurses have provided me choices and options.          1      2      3      4      5      6      7          strongly disagree      neutral      strongly agree</p> <p>2. I feel understood by my doctors and nurses.          1      2      3      4      5      6      7          strongly disagree      neutral      strongly agree</p> <p>3. My doctors and nurses convey confidence in my ability to make changes.          1      2      3      4      5      6      7          strongly disagree      neutral      strongly agree</p> <p>4. My doctors and nurses encourage me to ask questions.          1      2      3      4      5      6      7          strongly disagree      neutral      strongly agree</p> <p>5. My doctors and nurses listen to how I would like to do things.          1      2      3      4      5      6      7          strongly disagree      neutral      strongly agree</p> <p>6. My doctors and nurses try to understand how I see things before suggesting a new way to do things.          1      2      3      4      5      6      7          strongly disagree      neutral      strongly agree</p>

Form 409  
 St. Jude Children's Research Hospital  
 332 N. Lauderdale St.  
 Memphis, Tennessee 38105-2794  
 Rev. 9/03

PI: Melissa Hudson, M.D.  
 ACT Annual Questionnaire  
 Rev. 9/03  
 Page 5 of 10

Date \_\_\_\_\_

**HEALTH HABITS**

Date: \_\_\_\_\_

**Tobacco:**

- |  |   |
|--|---|
| <p>1. Have you smoked at least 100 cigarettes in your entire life?<br/> <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>2. In the past 12 months, has a doctor, nurse or other health professional discussed the health risks associated with tobacco and/or advised you to quite smoking?<br/> <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>3. Do you now smoke cigarettes every day, some days or not at all?<br/>                 Check what best describes you:<br/> <input type="checkbox"/> Every day; average cigarettes smoked per day _____<br/> <input type="checkbox"/> Some days; average cigarettes smoked per day _____<br/> <input type="checkbox"/> Not at all</p> <p>4. Have you smoked cigarettes at all in the past year?<br/> <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>5. How old were you when you first started smoking cigarettes regularly? _____ years old<br/> <input type="checkbox"/> Never smoked regularly<br/> <input type="checkbox"/> Don't know/Not sure</p> | <p>6. Have you ever used or tried any smokeless tobacco products such as chewing tobacco or snuff?<br/> <input type="checkbox"/> Yes<br/> <input type="checkbox"/> No<br/> <input type="checkbox"/> Don't know/Not sure</p> <p>7. Do you currently use chewing tobacco or snuff every day, some days or not at all?<br/> <input type="checkbox"/> Every day; (How much? _____)<br/> <input type="checkbox"/> Some days; (How much? _____)<br/> <input type="checkbox"/> Not at all<br/> <input type="checkbox"/> Don't know/Not sure</p> <p>8. Does anyone (besides yourself) who lives in your home smoke cigarettes now?<br/> <input type="checkbox"/> Yes. If yes; who? _____<br/> <input type="checkbox"/> No</p> |
|--|---|

**Alcohol:**

- |   |   |
|---|---|
| <p><i>A drink of alcohol is 1 can or bottle of beer, 1 glass of wine, 1 can or bottle of wine cooler, 1 cocktail or 1 shot of liquor.</i></p> <p>1. During the past 30 days, how often have you had at least one drink of any alcoholic beverage?<br/>                 _____ Days per week or _____ Days in past 30</p> <p>2. On the days when you drank, about how many drinks did you drink on the average?<br/>                 _____ Number of drinks _____ Don't know/not sure</p> | <p>3. Considering all types of alcoholic beverages, how many times during the past 30 days did you have 5 or more drinks on an occasion?<br/>                 _____ Number of times <input type="checkbox"/> None <input type="checkbox"/> Don't know/Not sure</p> <p>4. Do you drink and drive?<br/> <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>5. Do you ever drink to intoxication (get drunk)?<br/> <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>6. Have you ever had treatment for alcohol dependency?<br/> <input type="checkbox"/> Yes <input type="checkbox"/> No</p> |
|---|---|

**Exercise/Physical Activity:**

- |  |  |
|--|--|
| <p>1. During the past 30 days, <b>other than your regular job</b>, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening or walking for exercise?<br/> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know/Not sure</p> <p><i>We are interested in two types of physical activity: vigorous and moderate. Vigorous activities cause large increases in breathing or heart rate while moderate activities cause small increases in breathing or heart rate.</i></p> <p>2. Now, thinking about the moderate physical activities you do in a usual week, do you do moderate activities for at least 10 minutes at a time, such as brisk walking, bicycling, vacuuming, gardening or anything else that causes small increases in breathing or heart rate<br/> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know/Not sure</p> | <p>3. How many days per week do you do these moderate activities for at least 10 minutes at a time?<br/>                 _____ Days per week<br/> <input type="checkbox"/> Do not exercise at least 10 minutes weekly<br/> <input type="checkbox"/> Don't know/Not sure</p> <p>4. Now, thinking about the vigorous physical activities you do in a usual week, do you do vigorous activities for at least 10 minutes at a time, such as running, aerobics, heavy yard work or anything else that causes large increases in breathing or heart rate?<br/> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know/Not sure</p> <p>5. How many days per week do you do these vigorous activities for at least 10 minutes at a time?<br/>                 _____ Days per week<br/> <input type="checkbox"/> Do not exercise at least 10 minutes weekly<br/> <input type="checkbox"/> Don't know/Not sure</p> |
|--|--|

Form 409  
 St. Jude Children's Research Hospital  
 332 N. Lauderdale St.  
 Memphis, Tennessee 38105-2794  
 Rev. 9/03  
 PI: Melissa Hudson, M.D.  
 ACT Annual Questionnaire  
 Rev. 9/03  
 Page 6 of 10

Date \_\_\_\_\_

**HEALTH CONCERNS AND QUALITY OF LIFE**

How concerned have you been about the following health issues?	Not at all	Slightly	Moderately	Quite a bit	Extremely
Fear of cancer coming back	<input type="checkbox"/>				
Fear of health problems or second cancers after childhood cancer	<input type="checkbox"/>				
Concerns about paying for health care or medicines	<input type="checkbox"/>				
Problems finding a local doctor	<input type="checkbox"/>				
Problems with personal relationships	<input type="checkbox"/>				

This section is about your health and daily activities during the PAST 4 WEEKS. Please try to answer every question as accurately as you can.

<p>1. In general would you say your health is (mark one)  <input type="checkbox"/> Excellent <input type="checkbox"/> Very good <input type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor</p> <p>2. Compared to one year ago, how would you rate your health in general now?  <input type="checkbox"/> Much better now than one year ago  <input type="checkbox"/> Somewhat better now than one year ago  <input type="checkbox"/> About the same  <input type="checkbox"/> Somewhat worse now than one year ago  <input type="checkbox"/> Much worse now than one year ago</p> <p>3. The following items are about activities you might do during a typical day. Does your health now limit you in these activities? If so, how much? (check one box on each line)</p> <table border="1"> <thead> <tr> <th></th> <th>Yes, limited a lot</th> <th>Yes, limited a little</th> <th>No, not limited at all</th> </tr> </thead> <tbody> <tr> <td>Vigorous activities, such as running, lifting heavy objects, participating in strenuous sports</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Moderate activities, such as moving a table, pushing a vacuum cleaner, bowling or playing golf</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Lifting or carrying groceries</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Climbing several flights of stairs</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Climbing one flight of stairs</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Bending, kneeling or stooping</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Walking more than a mile</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Walking several blocks</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Walking one block</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Bathing or dressing yourself</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </tbody> </table>		Yes, limited a lot	Yes, limited a little	No, not limited at all	Vigorous activities, such as running, lifting heavy objects, participating in strenuous sports	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Moderate activities, such as moving a table, pushing a vacuum cleaner, bowling or playing golf	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Lifting or carrying groceries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Climbing several flights of stairs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Climbing one flight of stairs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Bending, kneeling or stooping	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Walking more than a mile	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Walking several blocks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Walking one block	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Bathing or dressing yourself	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>During the past 4 weeks, have you had any of the following problems with your work or other regular daily activities as a result of your physical health? (check one response for each question)</p> <p>4. Cut down the amount of time you spend on work or other activities  <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>5. Accomplished less than you would like. <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>6. Were limited in the kind of work or other activities you could do.  <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>7. Had difficulty performing the work or other activities (for example, it took extra effort). <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>During the past 4 weeks, have you had any of the following problems with your work or other regular daily activities as a result of any emotional problems (such as feeling depressed or anxious)?</p> <p>8. Cut down the amount of time you spend on work or other activities.  <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>9. Accomplished less than you would like. <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>10. Didn't do work or other activities as carefully as usual.  <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>11. During the past 4 weeks, to what extent has your physical health or emotional problems interfered with your normal social activities.  <input type="checkbox"/> Not at all <input type="checkbox"/> Slightly <input type="checkbox"/> Moderately  <input type="checkbox"/> Quite a bit <input type="checkbox"/> Extremely</p> <p>12. How much bodily pain have you had during the past 4 weeks?  <input type="checkbox"/> None <input type="checkbox"/> Very mild <input type="checkbox"/> Mild <input type="checkbox"/> Moderate  <input type="checkbox"/> Severe <input type="checkbox"/> Very severe</p> <p>13. During the past 4 weeks, how much did pain interfere with your normal work including both work outside the home and housework?  <input type="checkbox"/> Not at all <input type="checkbox"/> A little bit <input type="checkbox"/> Moderately  <input type="checkbox"/> Quite a bit <input type="checkbox"/> Extremely</p>
	Yes, limited a lot	Yes, limited a little	No, not limited at all																																										
Vigorous activities, such as running, lifting heavy objects, participating in strenuous sports	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																										
Moderate activities, such as moving a table, pushing a vacuum cleaner, bowling or playing golf	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																										
Lifting or carrying groceries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																										
Climbing several flights of stairs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																										
Climbing one flight of stairs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																										
Bending, kneeling or stooping	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																										
Walking more than a mile	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																										
Walking several blocks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																										
Walking one block	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																										
Bathing or dressing yourself	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																										

What issues/concerns would you like to discuss with health care team today?

1. These questions are about how you feel and how things have been with you during the past four weeks. For each question, please give the one answer that comes closest to the way you have been feeling. How much of the time during the past four weeks . . .

	All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time
Did you feel full of pep?	<input type="checkbox"/>					
Have you been a very nervous person?	<input type="checkbox"/>					
Have you felt so down in the dumps that nothing could cheer you up?	<input type="checkbox"/>					
Have you felt calm and peaceful?	<input type="checkbox"/>					
Did you have a lot of energy?	<input type="checkbox"/>					
Have you felt downhearted and blue?	<input type="checkbox"/>					
Did you feel worn out?	<input type="checkbox"/>					
Have you been a happy person?	<input type="checkbox"/>					
Did you feel tired?	<input type="checkbox"/>					
2. During the past four weeks, how much of the time has your physical health or emotional problems interfered with your social activities (like visiting friends, relatives, etc.)?	<input type="checkbox"/>					
3. How TRUE or FALSE is each of the following statements for you?						
I seem to get sick a little easier than other people	<input type="checkbox"/>					
I am as healthy as anybody I know	<input type="checkbox"/>					
I expect my health to get worse	<input type="checkbox"/>					
My health is excellent	<input type="checkbox"/>					

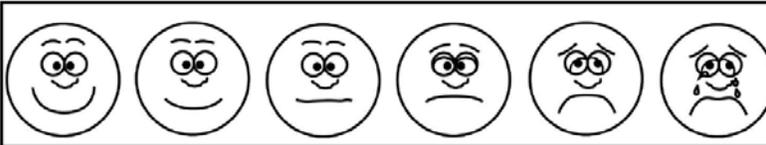
Form 409  
 St. Jude Children's Research Hospital  
 332 N. Lauderdale St.  
 Memphis, Tennessee 38105-2794  
 Rev. 9/03

PI: Melissa Hudson, M.D.  
 ACT Annual Questionnaire  
 Rev. 9/03  
 Page 7 of 10

Date \_\_\_\_\_

**INTERVAL HISTORY**

Date: \_\_\_\_\_



Pain \_\_\_\_\_ VPS FPS FLACC  
 (0-10) (Circle One)

**PHYSICAL EXAMINATION**

HT \_\_\_\_\_ ( \_\_\_\_\_ %ile) WT \_\_\_\_\_ ( \_\_\_\_\_ %ile) BSA \_\_\_\_\_ BMI \_\_\_\_\_ T \_\_\_\_\_ P \_\_\_\_\_ R \_\_\_\_\_ BP \_\_\_\_\_/\_\_\_\_\_ Recorded by: \_\_\_\_\_

(Normal/Abnormal)		Clinical Comments	Hematology
Eyes	<input type="checkbox"/>	General appearance	WBC _____ /mm <sup>3</sup>
	<input type="checkbox"/>	Conjunctiva and lids	Segs _____ %
	<input type="checkbox"/>	Pupils and irises	Bands _____ %
	<input type="checkbox"/>	Fundoscopy exam	Lymphs _____ %
ENMT	<input type="checkbox"/>	Auditory canals and TM	Monos _____ %
	<input type="checkbox"/>	Nasal mucosa, septum, turbinates	Eos _____ %
	<input type="checkbox"/>	Lips, teeth, gums	Hgb _____ gm/dl
	<input type="checkbox"/>	Buccal mucosa/oropharynx	Hct _____ %
CV	<input type="checkbox"/>	Auscultation of heart (rhythm/murmur)	Plts _____ /mm <sup>3</sup>
	<input type="checkbox"/>	Exam of carotid and femoral arteries	
	<input type="checkbox"/>	Peripheral (radial/pedal) pulses	<b>Urinalysis</b>
	<input type="checkbox"/>	Extremity edema/varicosities	Sp. gr. _____
Resp	<input type="checkbox"/>	Respiratory effort	pH _____
	<input type="checkbox"/>	Auscultation of lungs	Glucose _____
Chest	<input type="checkbox"/>	Inspection/palpation of breasts/axillae	Blood _____
	<input type="checkbox"/>	Presence of gynecomastia	Protein _____
Neck	<input type="checkbox"/>	Examination of neck	RBC _____
	<input type="checkbox"/>	Examination of thyroid	WBC _____
GI	<input type="checkbox"/>	Abdominal masses/tenderness	Nitrate _____
	<input type="checkbox"/>	Liver/spleen	Leuk est _____
	<input type="checkbox"/>	Anus/perineum/rectum	<b>Chemistries</b>
GU	<input type="checkbox"/>	External genitalia	Na _____
	<input type="checkbox"/>	Pubic hair	K _____
	<input type="checkbox"/>	Testicular volume/turgor	Cl _____
MS	<input type="checkbox"/>	Tanner stage; stage: _____	CO <sub>2</sub> _____
	<input type="checkbox"/>	Gait and station	BUN _____
	<input type="checkbox"/>	Exam of joints/bones/muscles	Cr _____
	<input type="checkbox"/>	Extremity clubbing, cyanosis, edema	Gluc _____
Skin	<input type="checkbox"/>	Inspection skin/subcutaneous tissues	Ca _____
	<input type="checkbox"/>	Palpation of skin/subcutaneous tissues	Mg _____
	<input type="checkbox"/>	Cranial nerves	PO <sub>4</sub> _____
Neuro	<input type="checkbox"/>	Motor (tone/bulk/strength)	URA _____
	<input type="checkbox"/>	Sensory exam	LDH _____
	<input type="checkbox"/>	DTRs	TP _____
	<input type="checkbox"/>	Cerebellar	Alb _____
	<input type="checkbox"/>	Gait	SGOT/AST _____
	<input type="checkbox"/>	Mental status	SGPT/ALT _____
Psych	<input type="checkbox"/>	Orientation to time, place, person	AlkP _____
	<input type="checkbox"/>	Recent/remote memory	Bili _____
	<input type="checkbox"/>	Mood and affect	Chol _____
Lymphatics	<input type="checkbox"/>	Cervical	TG _____
	<input type="checkbox"/>	Axillary	<b>Diagnostic Imaging</b>
	<input type="checkbox"/>	Inguinal/Femoral	

Form 409  
 St. Jude Children's Research Hospital  
 332 N. Lauderdale St.  
 Memphis, Tennessee 38105-2794  
 Rev. 10/02

PI: Melissa Hudson, M.D.  
 ACT Annual Questionnaire  
 Rev. 10/02  
 Page 8 of 10

Date \_\_\_\_\_

<b>CANCER HISTORY</b>		<b>ACTIVE PROBLEMS</b>	
Diagnosis: _____			
Date of Diagnosis: _____			
Protocol/Treatment Plan(s): _____			
<b>ISSUES DISCUSSED WITH PATIENT/FAMILY</b>			
<b>Cancer-related health risks</b>		<b>Healthy lifestyles</b>	<b>ACT Transition issues</b>
<input type="checkbox"/> Vision problems (cataracts, etc...) <input type="checkbox"/> Hearing loss; hearing protection measures <input type="checkbox"/> Memory, learning and attention problems <input type="checkbox"/> Heart and blood disease problem <input type="checkbox"/> Kidney and/or bladder problems <input type="checkbox"/> Bone problems (osteopenia, osteoporosis, osteonecrosis) <input type="checkbox"/> Infertility/early menopause <input type="checkbox"/> Deficiencies of thyroid/pituitary hormones affecting growth, development and metabolism <input type="checkbox"/> Need to monitor VP shunt function <input type="checkbox"/> Importance of compliance with seizure medications <input type="checkbox"/> Monitor for second cancers <input type="checkbox"/> Need for heightened breast cancer surveillance		<input type="checkbox"/> Do not smoke or chew tobacco <input type="checkbox"/> Sun protection <input type="checkbox"/> Restrict dietary fat/calories <input type="checkbox"/> Maintain a healthy weight <input type="checkbox"/> Exercise regularly <input type="checkbox"/> Breast/testicular self examination <input type="checkbox"/> Need for regular medical and dental check-ups <input type="checkbox"/> Seatbelt use <input type="checkbox"/> Responsible sexual behavior <input type="checkbox"/> Alcohol/drug use	<input type="checkbox"/> Purpose of ACT Clinic <input type="checkbox"/> Planned alumnus discharge date: _____ <input type="checkbox"/> Need to identify local doctor <input type="checkbox"/> Implications of alumnus status <input type="checkbox"/> St. Jude Registry follow-up <input type="checkbox"/> Other:
Other cancer-related health risks/other issues:			
<b>ORDERS FOR NEXT VISIT</b>		<b>ORDERS FOR CURRENT VISIT</b>	
Schedule return appointment in: 1 year: ____/____/____ Other; specify: ____/____/____		<b>Consultations:</b> <input type="checkbox"/> Audiology <input type="checkbox"/> Behavioral medicine <input type="checkbox"/> Cardiology <input type="checkbox"/> Dermatology <input type="checkbox"/> ENT <input type="checkbox"/> Endocrine <input type="checkbox"/> Neurology <input type="checkbox"/> Neurosurgery <input type="checkbox"/> Occupational therapy <input type="checkbox"/> Ophthalmology <input type="checkbox"/> Orthopedics <input type="checkbox"/> Physical therapy <input type="checkbox"/> Social work <input type="checkbox"/> Surgery <input type="checkbox"/> Other: _____ Provider _____ Signature _____	
<input type="checkbox"/> CBC diff/platelets <input type="checkbox"/> Urinalysis <input type="checkbox"/> Fasting lipid profile <input type="checkbox"/> Chem 18; other chemistries: _____ <input type="checkbox"/> IGF1 <input type="checkbox"/> IGFBP3 <input type="checkbox"/> Free T <sub>4</sub> <input type="checkbox"/> T <sub>4</sub> <input type="checkbox"/> TSH <input type="checkbox"/> FSH <input type="checkbox"/> LH <input type="checkbox"/> Estradiol <input type="checkbox"/> Testosterone <input type="checkbox"/> Reference serum Other lab: _____			
<input type="checkbox"/> Chest x-ray <input type="checkbox"/> ECHO/EKG <input type="checkbox"/> Pulmonary function tests <input type="checkbox"/> QCT-BMD <input type="checkbox"/> DEXA <input type="checkbox"/> MRI brain <input type="checkbox"/> MRI spine Other DI: _____			
Signature _____			

Form 409  
 St. Jude Children's Research Hospital  
 332 N. Lauderdale St.  
 Memphis, Tennessee 38105-2794  
 Rev. 10/02

PI: Melissa Hudson, M.D.  
 Family and Pregnancy  
 Rev. 10/02  
 Page 9 of 10

**FAMILY AND PREGNANCY HISTORY**

1. Indicate parent and sibling health history in table below:			
Family relationship	DOB	Sex	Health problem
Mother		<input type="checkbox"/> F	
Father		<input type="checkbox"/> M	
Sibling #1		<input type="checkbox"/> F <input type="checkbox"/> M	
Sibling #2		<input type="checkbox"/> F <input type="checkbox"/> M	
Sibling #3		<input type="checkbox"/> F <input type="checkbox"/> M	
Sibling #4		<input type="checkbox"/> F <input type="checkbox"/> M	
Sibling #5		<input type="checkbox"/> F <input type="checkbox"/> M	
2. Do any of your close relatives have the following medical conditions?			
Medical condition	No	Yes	Relationship of family member to patient
Cancer, tumors, leukemia			
Deafness at an early age			
Blindness at an early age			
Glaucoma			
Thyroid problem			
Heart attack, bypass surgery, angioplasty			
High cholesterol			
High blood pressure			
Blood clotting problems			
Stroke			
Seizures			
Asthma			
Cystic fibrosis			
Neurofibromatosis			

Form 409  
 St. Jude Children's Research Hospital  
 332 N. Lauderdale St.  
 Memphis, Tennessee 38105-2794  
 Rev. 10/02

PI: Melissa Hudson, M.D.  
 Family and Pregnancy  
 Rev. 10/02  
 Page 10 of 10

**FAMILY AND PREGNANCY HISTORY**

Medical condition	No	Yes	Relationship of family member to patient
Kidney disease			
Diabetes or blood sugar problem			
Sickle cell disease			
Thalassemia			
Multiple miscarriages or stillborn babies			
Abnormal chromosomes			
Learning disabilities or need for special education			
Mental retardation or developmental delay			
Anxiety or depression			
Arthritis at a young age			
Easily broken bones			
Any other conditions that run in the family; <b>specify:</b>			

**3. Have you ever been pregnant or fathered a child? Indicate details below:**

No.	Pregnancy outcome	Type of delivery	Length of pregnancy	Sex	Birth weight	Health problems
1	Date ___/___/___ <input type="checkbox"/> Live birth <input type="checkbox"/> Stillbirth <input type="checkbox"/> Miscarriage <input type="checkbox"/> Medical abortion	<input type="checkbox"/> Vaginal <input type="checkbox"/> C-section	Weeks pregnant: _____ <input type="checkbox"/> Pre-term (< 37 weeks) <input type="checkbox"/> Full-term ( 37- 42 weeks) <input type="checkbox"/> Post-term (> 42 weeks)	<input type="checkbox"/> F <input type="checkbox"/> M	____lbs____oz Name _____	
2	Date ___/___/___ <input type="checkbox"/> Live birth <input type="checkbox"/> Stillbirth <input type="checkbox"/> Miscarriage <input type="checkbox"/> Medical abortion	<input type="checkbox"/> Vaginal <input type="checkbox"/> C-section	Weeks pregnant: _____ <input type="checkbox"/> Pre-term (< 37 weeks) <input type="checkbox"/> Full-term ( 37- 42 weeks) <input type="checkbox"/> Post-term (> 42 weeks)	<input type="checkbox"/> F <input type="checkbox"/> M	____lbs____oz Name _____	
3	Date ___/___/___ <input type="checkbox"/> Live birth <input type="checkbox"/> Stillbirth <input type="checkbox"/> Miscarriage <input type="checkbox"/> Medical abortion	<input type="checkbox"/> Vaginal <input type="checkbox"/> C-section	Weeks pregnant: _____ <input type="checkbox"/> Pre-term (< 37 weeks) <input type="checkbox"/> Full-term ( 37- 42 weeks) <input type="checkbox"/> Post-term (> 42 weeks)	<input type="checkbox"/> F <input type="checkbox"/> M	____lbs____oz Name _____	
4	Date ___/___/___ <input type="checkbox"/> Live birth <input type="checkbox"/> Stillbirth <input type="checkbox"/> Miscarriage <input type="checkbox"/> Medical abortion	<input type="checkbox"/> Vaginal <input type="checkbox"/> C-section	Weeks pregnant: _____ <input type="checkbox"/> Pre-term (< 37 weeks) <input type="checkbox"/> Full-term ( 37- 42 weeks) <input type="checkbox"/> Post-term (> 42 weeks)	<input type="checkbox"/> F <input type="checkbox"/> M	____lbs____oz Name _____	
5	Date ___/___/___ <input type="checkbox"/> Live birth <input type="checkbox"/> Stillbirth <input type="checkbox"/> Miscarriage <input type="checkbox"/> Medical abortion	<input type="checkbox"/> Vaginal <input type="checkbox"/> C-section	Weeks pregnant: _____ <input type="checkbox"/> Pre-term (< 37 weeks) <input type="checkbox"/> Full-term ( 37- 42 weeks) <input type="checkbox"/> Post-term (> 42 weeks)	<input type="checkbox"/> F <input type="checkbox"/> M	____lbs____oz Name _____	

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## **ANNUAL QUESTIONNAIRE**

***UCSF***  
***San Francisco, CA***



**UCSF Children's Hospital**  
**Survivors of Childhood Cancer**  
**Long Term Follow Up Clinic**  
**Patient Questionnaire**

**PATIENT STICKER HERE**

**GENERAL INFORMATION:**

Patient Name:	Closest Contact:
Address:	Address:
City/State/ZIP:	City/State/ZIP:
Home Phone:	Home Phone:
Work Phone	Work Phone:
E-Mail Address:	Relationship to you:

**PHYSICIAN INFORMATION:**

Primary Doctor:	UCSF Physician:
Name:	Name:
Institution:	Specialty:
Address:	Other Care Provider:
City/State/ZIP:	Institution:
Phone Number:	Address:
Specialty:	Specialty:

**YOUR CANCER DIAGNOSIS (As you understand it):**

**After your visit, a medical report will be created and sent to your physician.**

Would you like a copy of this medical report?	<b>Yes</b>	<b>No</b>
	<input type="checkbox"/>	<input type="checkbox"/>

**MEDICATIONS:**

List all medications or health supplements you are currently using, including all vitamins, health supplements, birth control pills, and over the counter medications

MEDICATION NAME	DOSE/FREQUENCY	REASON TAKEN:

<b>PATIENT HISTORY</b>	<b>Yes</b>	<b>No</b>
Have you seen a physician or other health care practitioner in the past two years?	<input type="checkbox"/>	<input type="checkbox"/>
<b>Since completion of your cancer treatment, have you:</b>		
Had any new illnesses?	<input type="checkbox"/>	<input type="checkbox"/>
Had any surgeries?	<input type="checkbox"/>	<input type="checkbox"/>
Had any radiation therapy?	<input type="checkbox"/>	<input type="checkbox"/>
Had any hospitalization?	<input type="checkbox"/>	<input type="checkbox"/>
Started any new treatments?	<input type="checkbox"/>	<input type="checkbox"/>
Developed any new allergies?	<input type="checkbox"/>	<input type="checkbox"/>
Noticed any change in your general health?	<input type="checkbox"/>	<input type="checkbox"/>
<b>In the past year have you experienced:</b>		
Weight gain or loss of 10 or more pounds?	<input type="checkbox"/>	<input type="checkbox"/>
Skin abnormalities?	<input type="checkbox"/>	<input type="checkbox"/>
Unusual spots?	<input type="checkbox"/>	<input type="checkbox"/>
Hair changes?	<input type="checkbox"/>	<input type="checkbox"/>
Frequent headaches?	<input type="checkbox"/>	<input type="checkbox"/>
Eye pain, eye itching, or changes in vision?	<input type="checkbox"/>	<input type="checkbox"/>
Ear pain, drainage, or decreased hearing?	<input type="checkbox"/>	<input type="checkbox"/>
Frequent nose bleeds, post nasal drip, or sneezing?	<input type="checkbox"/>	<input type="checkbox"/>
Dental pain, gum swelling, or oral bleeding?	<input type="checkbox"/>	<input type="checkbox"/>
Difficulty swallowing?	<input type="checkbox"/>	<input type="checkbox"/>
Swelling or lumps in the side or front of your neck?	<input type="checkbox"/>	<input type="checkbox"/>
Increased sweating, and/or feeling cold?	<input type="checkbox"/>	<input type="checkbox"/>
Decrease in energy, and/or feelings of excitement?	<input type="checkbox"/>	<input type="checkbox"/>
Shortness of breath, wheezing, and/or decrease in ability to run, climb stairs?	<input type="checkbox"/>	<input type="checkbox"/>
Swelling of your legs or feet?	<input type="checkbox"/>	<input type="checkbox"/>
Chest pain, palpitations, or feeling of heart jumps?	<input type="checkbox"/>	<input type="checkbox"/>
Fainting and/or spells of unconsciousness?	<input type="checkbox"/>	<input type="checkbox"/>
Frequent nausea, vomiting, constipation, and/or diarrhea?	<input type="checkbox"/>	<input type="checkbox"/>
Frequent abdominal pain?	<input type="checkbox"/>	<input type="checkbox"/>
Black or bloody stools?	<input type="checkbox"/>	<input type="checkbox"/>
Episodes of yellow eyes and/or jaundice?	<input type="checkbox"/>	<input type="checkbox"/>
The urge to drink more than 8 glasses of water or other fluids daily?	<input type="checkbox"/>	<input type="checkbox"/>
Hemorrhoids?	<input type="checkbox"/>	<input type="checkbox"/>
Painful, pink, and/or red bloody urine?	<input type="checkbox"/>	<input type="checkbox"/>
To awaken more than one time a night to urinate?	<input type="checkbox"/>	<input type="checkbox"/>
The need to urinate more frequently than every 4-6 hours during the day?	<input type="checkbox"/>	<input type="checkbox"/>
Convulsions?	<input type="checkbox"/>	<input type="checkbox"/>
The feeling of pins & needles in your fingers and/or toes?	<input type="checkbox"/>	<input type="checkbox"/>

**HISTORY CONTINUED**

<b>In the past year have you experienced:</b>	<b>Yes</b>	<b>No</b>
Vertigo or other sensation changes in your skin?	<input type="checkbox"/>	<input type="checkbox"/>
Increased feelings of nervousness?	<input type="checkbox"/>	<input type="checkbox"/>
Problems with memory, thinking, and/or school/job performance?	<input type="checkbox"/>	<input type="checkbox"/>
Problems controlling temper, making friends, getting along with others?	<input type="checkbox"/>	<input type="checkbox"/>
Feelings of depression?	<input type="checkbox"/>	<input type="checkbox"/>
Trouble sleeping?	<input type="checkbox"/>	<input type="checkbox"/>
Any problems related to sexual function?	<input type="checkbox"/>	<input type="checkbox"/>
Do you engage in moderate physical activity 3 or more times weekly?	<input type="checkbox"/>	<input type="checkbox"/>
Do you engage in vigorous physical activity 3 or more times weekly?	<input type="checkbox"/>	<input type="checkbox"/>
Do you eat junk foods regularly?	<input type="checkbox"/>	<input type="checkbox"/>
Do you drink more than one can of soda per day?	<input type="checkbox"/>	<input type="checkbox"/>
Are you dieting to lose weight?	<input type="checkbox"/>	<input type="checkbox"/>
Do you snack frequently between meals?	<input type="checkbox"/>	<input type="checkbox"/>

**BEHAVIOR**

	<b>Yes</b>	<b>No</b>
Do you smoke?	<input type="checkbox"/>	<input type="checkbox"/>
<i>If Yes:</i>		
Do you smoke 2 or more cigarettes daily?	<input type="checkbox"/>	<input type="checkbox"/>
Do you wish to stop?	<input type="checkbox"/>	<input type="checkbox"/>
Do you use 'recreational drugs'?	<input type="checkbox"/>	<input type="checkbox"/>
Do you drink more than 1 shot of liquor/1 can of beer/4 oz of wine daily?	<input type="checkbox"/>	<input type="checkbox"/>
Do you use sun screen?	<input type="checkbox"/>	<input type="checkbox"/>
Do you lie in the sun to tan, and/or go to tanning studios/use tanning equipment?	<input type="checkbox"/>	<input type="checkbox"/>
Do you drive after having more than one drink?	<input type="checkbox"/>	<input type="checkbox"/>
Do you use seatbelts when you drive most of the time?	<input type="checkbox"/>	<input type="checkbox"/>
Are you concerned that your cancer will come back?	<input type="checkbox"/>	<input type="checkbox"/>
Are you concerned about any long term effects from your treatment?	<input type="checkbox"/>	<input type="checkbox"/>
Do you have concerns about present or future children?	<input type="checkbox"/>	<input type="checkbox"/>
Do you feel healthy?	<input type="checkbox"/>	<input type="checkbox"/>
Have you ever been pregnant/fathered a child?	<input type="checkbox"/>	<input type="checkbox"/>

<b>FAMILY HEALTH HISTORY:</b>	<b>Age:</b>	<b>Health Problem(If Any)</b>
1. Father		
2. Mother		
3. Brother/Sister		
4. Brother/Sister		
5. Maternal Grandmother		
6. Maternal Grandfather		
7. Paternal Grandmother		
8. Paternal Grandfather		
9. Child		
10. Child		
11. Child		

<b>FOR WOMEN:</b>	<b>Yes</b>	<b>No</b>
Have you had any menstrual problems?	<input type="checkbox"/>	<input type="checkbox"/>
Are your periods regular?	<input type="checkbox"/>	<input type="checkbox"/>
Do you take birth control pills?	<input type="checkbox"/>	<input type="checkbox"/>
Have you noticed any excessive bleeding?	<input type="checkbox"/>	<input type="checkbox"/>
At what age did you first have your period: _____		

<b>PREGNANCY HISTORY</b>							
	<b>Term</b>	<b>Premature</b>	<b>Miscarriage</b>	<b>Abortion</b>	<b>Length of Pregnancy</b>	<b>Sex</b>	<b>Birth Weight</b>
<b>1</b>							
<b>2</b>							
<b>3</b>							
<b>4</b>							
<b>5</b>							

**Please list any questions you wish to have answered today.**

1.
2.
3.
4.
5.
6.
7.

**ANNUAL QUESTIONNAIRE: CHILD/TEEN  
(ENGLISH & SPANISH)**

*City of Hope  
Duarte, CA*



**City of Hope National Medical Center Survivorship Clinic**  
*Providing Specialized Follow-Up Care for Survivors of Pediatric Malignancies*

**Annual Health Questionnaire – Child/Teen**

Name: \_\_\_\_\_ Age \_\_\_\_\_ Today's Date: \_\_\_\_\_

Street Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Phone Numbers: Home: \_\_\_\_\_ Work: \_\_\_\_\_ Cell: \_\_\_\_\_

Who lives with you? \_\_\_\_\_

Emergency contact: \_\_\_\_\_ Relationship: \_\_\_\_\_ Phone: \_\_\_\_\_

1. Who is your primary healthcare provider?  
(for routine healthcare, minor illnesses)

\_\_\_\_\_  
Name

\_\_\_\_\_  
Address

\_\_\_\_\_  
City State Zip

\_\_\_\_\_  
Phone

Who is your oncologist?  
(cancer doctor)

\_\_\_\_\_  
Name

\_\_\_\_\_  
Address

\_\_\_\_\_  
City State Zip

\_\_\_\_\_  
Phone

2. Do you want us to send a report from today's visit to your:

- Primary healthcare provider?  Yes  No

- Oncologist?  Yes  No

3. Have you been seen by any doctor, hospitalized, or had surgery in the past year?

Yes  No If yes, describe: \_\_\_\_\_

4. Please list all medicines that you take regularly (whether prescribed by a doctor or not):

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

5. Do you have any allergies?  Yes  No

If yes, list allergies: \_\_\_\_\_

6. Have you had any immunizations (vaccines) within the past year?

Yes  No If yes, list: \_\_\_\_\_

7. Education:

What grade are you in? \_\_\_\_\_

In the past year, have you had:

Special education classes  Yes  No

Gifted/Talented/Advanced placement classes  Yes  No

Are you having any academic problems in school?  Yes  No

If yes, what problems are you having? (include names of classes):

\_\_\_\_\_  
\_\_\_\_\_

Are you having any behavior (discipline) problems in school?  Yes  No

If yes, what problems are you having? \_\_\_\_\_

\_\_\_\_\_

How many days were you absent during the past school year:

0-5  6-10  11-20  more than 20

8. Do you have an after-school or summer job?  Yes  No

9. Do you exercise or participate in sports?

No

Less than once a week

1 to 2 times a week for:  Less than 30 min  30 to 60 min  More than 60 min

3 or more times a week for:  Less than 30 min  30 to 60 min  More than 60 min

Are you able to keep up with your friends when playing or participating in sports?

Yes  No

**Please continue to the next page.**

10. Do you have any of the following health problems?

- Often feeling tired (fatigued)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Unexplained weight loss	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Unexplained weight gain	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Unexplained fevers or night sweats	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Rashes	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Changes with skin mole(s)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Location: _____
- New lump(s)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Location: _____
- Easy bruising or bleeding	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Frequent headaches	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Do you wear glasses?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Last eye exam: _____
- Do you wear contact lenses?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Trouble with vision that is <u>not</u> corrected by glasses or contacts	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Trouble with hearing	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Do you wear hearing aids?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Last hearing test: _____
- Frequent sinus congestion or "hayfever"	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Dental problems	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Last dental exam: _____
- Difficulty swallowing	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Rapid or irregular heart beat	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Chest pain	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Swelling or puffiness of feet or hands	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Shortness of breath	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Frequent cough	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Wheezing	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Loss of appetite	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Frequent nausea or vomiting	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Frequent heartburn	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Frequent abdominal pain	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Frequent diarrhea	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Frequent constipation	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Blood in stools	<input type="checkbox"/> Yes	<input type="checkbox"/> No	

- Pain or burning with urination	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Need to urinate frequently	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Only at night
- Blood in urine	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Joint or bone pain	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Location: _____
- Frequent muscle aches	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Location: _____
- Other frequent pain	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Location: _____
- Tremors of hands	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Problems with coordination	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Seizures (convulsions)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Dizziness	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Memory problems	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Often feeling sad or down	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Often feeling anxious or worried	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Frequent mood swings	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Trouble sleeping	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Do you take street drugs?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Describe: _____
- Do you smoke cigarettes now?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Age started: ___ Packs/day ___
- Do you smoke cigars or pipes now?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	How often? _____
- Do you chew or dip tobacco now?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	How often? _____
- Have you ever smoked or used tobacco in the past?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	How long? ___ Date quit: ___
- Does anyone in your home smoke?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Do you drink beer, wine, or liquor?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- How would you rate your overall health?	<input type="checkbox"/> Excellent	<input type="checkbox"/> Very good	<input type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor

Please continue to the next page.

11. Please answer the following questions **based on the past 4 weeks:**

- I sleep well at night	<input type="checkbox"/> None of the time	<input type="checkbox"/> A little of the time	<input type="checkbox"/> Some of the time	<input type="checkbox"/> Most of the time	<input type="checkbox"/> All of the time	
- When I wake up, I feel rested	<input type="checkbox"/> None of the time	<input type="checkbox"/> A little of the time	<input type="checkbox"/> Some of the time	<input type="checkbox"/> Most of the time	<input type="checkbox"/> All of the time	
- I have plenty of energy	<input type="checkbox"/> None of the time	<input type="checkbox"/> A little of the time	<input type="checkbox"/> Some of the time	<input type="checkbox"/> Most of the time	<input type="checkbox"/> All of the time	
- I am so tired that it interferes with my daily activities	<input type="checkbox"/> None of the time	<input type="checkbox"/> A little of the time	<input type="checkbox"/> Some of the time	<input type="checkbox"/> Most of the time	<input type="checkbox"/> All of the time	
- About how many <u>hours</u> do you sleep on an average night?	<input type="checkbox"/> Less than 4	<input type="checkbox"/> 4 to 5	<input type="checkbox"/> 6 to 7	<input type="checkbox"/> 8 or more		
- About how many <u>times do you wake up</u> on an average night?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4 or more	
- <u>How much</u> bodily <u>pain</u> have you had over the past 4 weeks?	<input type="checkbox"/> None	<input type="checkbox"/> Very mild	<input type="checkbox"/> Mild	<input type="checkbox"/> Moderate	<input type="checkbox"/> Severe	<input type="checkbox"/> Very severe
- <u>How often</u> have you had bodily <u>pain</u> over the past 4 weeks?	<input type="checkbox"/> None of the time	<input type="checkbox"/> A little of the time	<input type="checkbox"/> Some of the time	<input type="checkbox"/> Most of the time	<input type="checkbox"/> All of the time	
- Where in your body is your <u>pain</u> located?	<input type="checkbox"/> Head	<input type="checkbox"/> Arm or leg	<input type="checkbox"/> Back	<input type="checkbox"/> Stomach	<input type="checkbox"/> Other: _____	<input type="checkbox"/> No pain

12. Has anyone in your family (parents, brothers or sisters, grandparents, aunts, uncles, and cousins) been diagnosed with any of the following **during the past year?**

			<u>If yes, list family member:</u>	<u>Age:</u>
Cancer	<input type="checkbox"/> Yes	<input type="checkbox"/> No	_____	_____
Diabetes	<input type="checkbox"/> Yes	<input type="checkbox"/> No	_____	_____
High blood pressure	<input type="checkbox"/> Yes	<input type="checkbox"/> No	_____	_____
Kidney disease	<input type="checkbox"/> Yes	<input type="checkbox"/> No	_____	_____
Heart attack	<input type="checkbox"/> Yes	<input type="checkbox"/> No	_____	_____
Stroke	<input type="checkbox"/> Yes	<input type="checkbox"/> No	_____	_____
Heart surgery	<input type="checkbox"/> Yes	<input type="checkbox"/> No	_____	_____

13. Do you have health insurance?  Yes  No

If yes, please indicate how you obtain your health insurance:

- |  |  |
|--|--|
| <input type="checkbox"/> Through my parent's job                                     | <input type="checkbox"/> Through my job                          |
| <input type="checkbox"/> Through a policy my parents (or someone else) bought for me | <input type="checkbox"/> Medi-Cal or other government assistance |
| <input type="checkbox"/> Through my school   | <input type="checkbox"/> Don't know                              |
| <input type="checkbox"/> Other: _____  |  |

14. During the past year, have you been denied health insurance because of your health history?

- Yes  No  Don't know

15. Do you have any other health problems or concerns that have not been addressed in this questionnaire?

- Yes  No If yes, please describe: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

16. Is there anything else about your health status that you are worried about or that you would like us to know about?

- Yes  No If yes, please describe: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

17. Who completed this questionnaire?

- Self (patient)  
 Mother  
 Father  
 Other (describe): \_\_\_\_\_

18. What is the primary language of the person completing this questionnaire?

- English  
 Spanish  
 Other (describe): \_\_\_\_\_

**For female patients only: Please continue to the next page.**

**Females only:**

19. Have you had a menstrual period during the past year?  Yes  No

If yes, date of your last menstrual period: \_\_\_\_\_

How often are your periods? Every \_\_\_\_ days

How long do your periods last? \_\_\_\_\_ days

Is your cycle:  Regular  Irregular

Is your menstrual flow:  Light  Moderate  Heavy

Are you menstruating today?  Yes  No



**Clínica de Supervivencia del City of Hope**  
*Atención postratamiento especializada para sobrevivientes de malignidades pediátricas*

**Cuestionario anual de salud – Niño/Adolescente**

Nombre: \_\_\_\_\_ Edad \_\_\_\_\_ Fecha: \_\_\_\_\_

Dirección: \_\_\_\_\_

Ciudad: \_\_\_\_\_ Estado: \_\_\_\_\_ Código Postal: \_\_\_\_\_

Números de Teléfono: Casa: \_\_\_\_\_ Empleo: \_\_\_\_\_ Celular: \_\_\_\_\_

Con quien vive usted? \_\_\_\_\_

Contacto de emergencia: \_\_\_\_\_ Relación: \_\_\_\_\_ Teléfono: \_\_\_\_\_

1. Quien es su medico primario?  
(para cuidado medico de rutina, enfermedades menores)

Nombre \_\_\_\_\_

Dirección \_\_\_\_\_

Ciudad \_\_\_\_\_ Estado \_\_\_\_\_ Código Postal \_\_\_\_\_

Teléfono \_\_\_\_\_

Quien es su oncólogo?  
(médico especialista de cáncer)

Nombre \_\_\_\_\_

Dirección \_\_\_\_\_

Ciudad \_\_\_\_\_ Estado \_\_\_\_\_ Código Postal \_\_\_\_\_

Teléfono \_\_\_\_\_

2. ¿Le gustaría que enviemos un informe acerca de su visita de ahora, a su:

- Médico primario?  Sí  No

- Oncólogo?  Sí  No

3. ¿Le ha examinado algún médico, ha estado hospitalizado o ha tenido una cirugía durante el año pasado?

Sí  No Si es así, explique: \_\_\_\_\_

4. Por favor, escriba todos los medicamentos que usted toma regularmente (con o sin receta).

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

5. Tiene usted alguna alergia?  Sí  No

Si es así, escriba una lista de las alergias:

\_\_\_\_\_

6. ¿Ha tenido usted alguna vacunación dentro del año pasado?

Sí  No Si es así, haga una lista de las vacunaciones:

\_\_\_\_\_

7. Educación:

¿En que grado está usted? \_\_\_\_\_

Durante el año pasado, ha asistido:

Clases de educación especial  Sí  No

Clases para niños superdotados/talentedos/clases avanzadas  Sí  No

¿Tiene usted algún problema académico?  Sí  No

Si es así, especifique (incluya los nombres de las clases)

\_\_\_\_\_

\_\_\_\_\_

¿Tiene usted algún problema de comportamiento (disciplina) en la escuela?  Sí  No

Si es así, especifique:

\_\_\_\_\_

\_\_\_\_\_

¿Cuántos días era usted ausente durante el año escolar pasado?

0-5

6-10

11-20

más de 20

8. ¿Tiene usted un trabajo luego de la escuela o de verano?  Sí  No

9. ¿Hace ejercicio o practica deportes?

No

Rara vez

De 1 a 2 veces a la semana por:  menos de 30 min.  30 a 60 min.  más de 60 min.

3 o más veces a la semana por:  menos de 30 min.  30 a 60 min.  más de 60 min.

¿Puede mantener el mismo ritmo que sus amigos cuando juegas o practicas deportes?

Sí  No

**POR FAVOR SIGA A LA SIGUIENTE PÁGINA.**

10. ¿Tiene usted alguno de los siguientes problemas?

- Sensación frecuente de cansancio/fatiga	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Pérdida de peso inexplicable	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Aumento de peso inexplicable	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Fiebre inexplicable o sudor nocturno	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Sarpullido o cambios en la piel	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Cambios en lunar(es)	<input type="checkbox"/> Sí	<input type="checkbox"/> No	Ubicación: _____
- Algún nuevo bulto, chichón, alguna nueva inflamación	<input type="checkbox"/> Sí	<input type="checkbox"/> No	Ubicación: _____
- Aparecen moretones con facilidad	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Dolores de cabeza frecuentes	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- ¿Usa anteojos?	<input type="checkbox"/> Sí	<input type="checkbox"/> No	Último examen de la vista: _____
- ¿Usa lentes de contacto?	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Problema de la visión que <u>no</u> se corrige con los anteojos o los lentes de contacto	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Problema de audición	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- ¿Usa aparato para oír?	<input type="checkbox"/> Sí	<input type="checkbox"/> No	Último examen de la audición: _____
- Frecuente congestión de los senos nasales, fiebre de heno o "alergia"	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Problemas dentales	<input type="checkbox"/> Sí	<input type="checkbox"/> No	Último examen dental: _____
- Dificultad para tragar	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Latidos del corazón rápidos o irregulares	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Dolor en el pecho	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Inflamación o hinchazón de los pies o las manos	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Dificultad para respirar	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Tos frecuente	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Silbido al respirar (jadeo)	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Pérdida del apetito	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Náuseas o vómitos frecuentes	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Acidez estomacal frecuente	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Dolor abdominal frecuente o intenso	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Diarrea frecuente	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Estreñimiento frecuente	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Sangre en las heces	<input type="checkbox"/> Sí	<input type="checkbox"/> No	

- Dolor o ardor al orinar	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Necesidad de orinar con frecuencia	<input type="checkbox"/> Sí	<input type="checkbox"/> No	<input type="checkbox"/> Sólo por la noche
- Sangre en la orina	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Dolor de articulaciones o huesos	<input type="checkbox"/> Sí	<input type="checkbox"/> No	Ubicación: _____
- Dolor frecuente en los músculos	<input type="checkbox"/> Sí	<input type="checkbox"/> No	Ubicación: _____
- Otro dolor frecuente	<input type="checkbox"/> Sí	<input type="checkbox"/> No	Ubicación: _____
- Temblores en las manos	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Problemas de coordinación	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Ataques, convulsiones	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Mareos	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Problemas con la memoria	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Frecuente sensación de tristeza/decaimiento	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Frecuente sensación de preocupación/ansiedad	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Cambios de humor frecuentes	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Dificultad para dormir	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- ¿Usa drogas ilegales?	<input type="checkbox"/> Sí	<input type="checkbox"/> No	Describe: _____
- ¿Fuma?	<input type="checkbox"/> Sí	<input type="checkbox"/> No	Edad de inicio: _____ Paquetes por día: _____
- ¿Fuma puros/ pipa?	<input type="checkbox"/> Sí	<input type="checkbox"/> No	¿Con qué frecuencia? _____
- ¿Mastica tabaco o lo frota contra las encías?	<input type="checkbox"/> Sí	<input type="checkbox"/> No	¿Con qué frecuencia? _____
- ¿Ha fumado o usado tabaco alguna vez?	<input type="checkbox"/> Sí	<input type="checkbox"/> No	¿Por cuánto tiempo? _____ Fecha en que dejaste de fumar _____
- ¿Alguien en su casa fuma?	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- ¿Usted toma cerveza, vino, licor?	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- ¿Cómo tasaría usted su salud generalmente?	<input type="checkbox"/> Excelente	<input type="checkbox"/> Muy Bueno	<input type="checkbox"/> Bueno <input type="checkbox"/> Aceptable <input type="checkbox"/> Malo

POR FAVOR SIGA A LA SIGUIENTE PÁGINA.

11. Durante las **cuartas semanas pasadas**:

- Duermo bien por la noche	<input type="checkbox"/> Nunca	<input type="checkbox"/> Rara vez	<input type="checkbox"/> De vez en cuando	<input type="checkbox"/> La mayoría del tiempo	<input type="checkbox"/> Siempre	
- Cuando me despierto, me siento descansado	<input type="checkbox"/> Nunca	<input type="checkbox"/> Rara vez	<input type="checkbox"/> De vez en cuando	<input type="checkbox"/> La mayoría del tiempo	<input type="checkbox"/> Siempre	
- Tengo suficiente energía	<input type="checkbox"/> Nunca	<input type="checkbox"/> Rara vez	<input type="checkbox"/> De vez en cuando	<input type="checkbox"/> La mayoría del tiempo	<input type="checkbox"/> Siempre	
- Mi fatiga interfiere con mis actividades diarias	<input type="checkbox"/> Nunca	<input type="checkbox"/> Rara vez	<input type="checkbox"/> De vez en cuando	<input type="checkbox"/> La mayoría del tiempo	<input type="checkbox"/> Siempre	
- ¿Cuántas horas duerme usted durante una noche media?	<input type="checkbox"/> Menos de 4	<input type="checkbox"/> De 4 a 5	<input type="checkbox"/> De 6 a 7	<input type="checkbox"/> 8 o más		
- ¿Cuántas veces se despierta durante una noche media?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4 o más	
- Durante las cuatro semanas pasadas, su dolor corporal era:	<input type="checkbox"/> Nada	<input type="checkbox"/> Muy suave	<input type="checkbox"/> Suave	<input type="checkbox"/> Moderado	<input type="checkbox"/> Severo	<input type="checkbox"/> Severísimo
- ¿En las 4 semanas pasadas, con qué frecuencia ha tenido <u>dolor</u> corporal?	<input type="checkbox"/> Nunca	<input type="checkbox"/> Rara vez	<input type="checkbox"/> De vez en cuando	<input type="checkbox"/> La mayoría del tiempo	<input type="checkbox"/> Siempre	

12. ¿Durante el año pasado, alguien en su familia (padres, hermanos/hermanas, abuelos, tías, tíos, y primos) ha sido diagnosticado con cualquiera de los siguientes?

	<input type="checkbox"/> Sí	<input type="checkbox"/> No	Si es así, cual miembro de su familia:	Edad:
Cáncer	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
Diabetes	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
Alta Presión	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
Enfermedad Renal	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
Ataque de Corazón	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
Embolia	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
Cirugía Cardíaca	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____

13. ¿Tiene algún otro problema médico o preocupación de su salud que no se presenta en este cuestionario?

Sí     No    Si es así, especifique: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

14. ¿Hay algún otro aspecto de su estado de salud que le preocupa o sobre el que desearía que supiéramos?

Sí     No    Si es así, especifique: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

15. ¿Quién completó este cuestionario?

Usted (paciente)

Madre

Padre

Otro (especifique): \_\_\_\_\_

16. ¿Cuál es la lengua primaria de la persona que completa este cuestionario?

Inglés

Español

Otra (especifique): \_\_\_\_\_

**PARA PACIENTES FEMENINOS SÓLO: *POR FAVOR SIGA A LA PÁGINA SIGUIENTE.***

**MUJERES SOLO:**

15. ¿Ha tenido usted una menstruación durante el año pasado?  Sí  No

¿Si es así, cuál era la fecha de su menstruación pasado?: \_\_\_\_\_

¿Con que frecuencia son sus menstruaciones? Cada \_\_\_\_ días

¿Cuánto duran sus menstruaciones? \_\_\_\_ días

Su ciclo es:  Regular  Irregular

Su flujo menstrual es:  Leve  Moderado  Abundante

¿Menstrúa usted hoy?  Sí  No

**ANNUAL QUESTIONNAIRE: ADULT  
(ENGLISH & SPANISH)**

*City of Hope  
Duarte, CA*



**City of Hope National Medical Center Survivorship Clinic**  
*Providing Specialized Follow-Up Care for Survivors of Pediatric Malignancies*

**Annual Health Questionnaire - Adult**

Name: \_\_\_\_\_ Age \_\_\_\_\_ Today's Date: \_\_\_\_\_

Street Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Phone Numbers: Home: \_\_\_\_\_ Work: \_\_\_\_\_ Cell: \_\_\_\_\_

Who lives with you? \_\_\_\_\_

Emergency contact: \_\_\_\_\_ Relationship: \_\_\_\_\_ Phone: \_\_\_\_\_

1. Who is your primary healthcare provider?  
(for routine healthcare, minor illnesses)

\_\_\_\_\_  
Name

\_\_\_\_\_  
Address

\_\_\_\_\_  
City State Zip

\_\_\_\_\_  
Phone

Who is your oncologist?  
(cancer doctor)

\_\_\_\_\_  
Name

\_\_\_\_\_  
Address

\_\_\_\_\_  
City State Zip

\_\_\_\_\_  
Phone

2. Do you want us to send a report from today's visit to your:

- Primary healthcare provider?  Yes  No

- Oncologist?  Yes  No

3. Have you been seen by any doctor, hospitalized, or had surgery in the past year?

Yes  No If yes, describe: \_\_\_\_\_

4. Please list all medicines that you take regularly (whether prescribed by a doctor or not):

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

5. Do you have any allergies?  Yes  No

If yes, list allergies: \_\_\_\_\_

6. Have you had any immunizations (vaccines) within the past year?

Yes  No If yes, list: \_\_\_\_\_

7. What is your current marital status?

Single  Engaged  Married  Divorced  Widowed

8. Education:

Are you currently a student?  Yes  No

If yes, name of school: \_\_\_\_\_ Area of study: \_\_\_\_\_

Number of years you have been in current school program: \_\_\_\_\_

Are you having any academic problems?  Yes  No

9. Employment:

Are you currently employed?  Yes  No

If yes, what is your occupation? \_\_\_\_\_

How many hours do you work per week? \_\_\_\_\_

How long have you been employed in this job? \_\_\_\_\_

Are you having any problems with your job?  Yes  No

If yes, what problems are you having? \_\_\_\_\_

10. Do you have health insurance?  Yes  No

If yes, please indicate how you obtain your health insurance:

\_\_\_ Through my job

\_\_\_ Through school

\_\_\_ Through my spouse/partner's job

\_\_\_ Through a policy I bought myself

\_\_\_ Through my parent's job

\_\_\_ Medi-Cal or other government assistance

\_\_\_ Don't know

\_\_\_ Other: \_\_\_\_\_

11. During the past year, have you been denied health insurance because of your health history?

Yes  No  Don't know

12. Do you have any of the following health problems?

- Often feeling tired (fatigued)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Unexplained weight loss	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Unexplained weight gain	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Unexplained fevers or night sweats	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Rashes	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Changes with skin mole(s)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Location: _____
- New lump(s)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Location: _____
- Easy bruising or bleeding	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Frequent headaches	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Do you wear glasses?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Last eye exam: _____
- Do you wear contact lenses?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Trouble with vision that is <u>not</u> corrected by glasses or contacts	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Trouble with hearing	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Do you wear hearing aids?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Last hearing test: _____
- Frequent sinus congestion or "hayfever"	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Dental problems	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Last dental exam: _____
- Difficulty swallowing	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Rapid or irregular heart beat	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Chest pain	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Swelling or puffiness of feet or hands	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Shortness of breath	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Frequent cough	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Wheezing	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Loss of appetite	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Frequent nausea or vomiting	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Frequent heartburn	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Frequent abdominal pain	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Frequent diarrhea	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Frequent constipation	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Blood in stools	<input type="checkbox"/> Yes	<input type="checkbox"/> No	

- Pain or burning with urination	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Need to urinate frequently	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Only at night
- Blood in urine	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Sexual problems	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Hot flashes	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Joint or bone pain	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Location: _____
- Frequent muscle aches	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Location: _____
- Other frequent pain	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Location: _____
- Tremors of hands	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Problems with coordination	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Seizures (convulsions)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Dizziness	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Memory problems	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Often feeling sad or down	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Often feeling anxious or worried	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Frequent mood swings	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Trouble sleeping	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
- Do you take street drugs?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<u>If yes</u> , describe: _____
- Do you smoke cigarettes now?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<u>If yes</u> , age started: _____ Packs/day _____
- Do you smoke cigars or pipes now?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<u>If yes</u> , how often? _____
- Do you chew or dip tobacco now?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<u>If yes</u> , how often? _____
- Have you ever smoked or used tobacco products in the past?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<u>If yes</u> : How long? _____ Date quit: _____
- Does anyone in your home smoke?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<u>If yes</u> , who? _____
- Do you drink beer, wine, or liquor?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
<u>If yes</u> , how many alcoholic beverages do you consume in an <u>average week</u> ?			
<input type="checkbox"/> Beer: ___ cans/bottles	<input type="checkbox"/> Wine: ___ glasses	<input type="checkbox"/> Mixed drinks: ___ drinks	
<input type="checkbox"/> Less than one alcoholic beverage per week			
- How would you rate your overall health?	<input type="checkbox"/> Excellent	<input type="checkbox"/> Very good	<input type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor

13. Please answer the following questions **based on the past 4 weeks**:

- I sleep well at night       None of the time     A little of the time     Some of the time     Most of the time     All of the time
- 
- When I wake up, I feel rested       None of the time     A little of the time     Some of the time     Most of the time     All of the time
- 
- I have plenty of energy       None of the time     A little of the time     Some of the time     Most of the time     All of the time
- 
- I am so tired that it interferes with my daily activities       None of the time     A little of the time     Some of the time     Most of the time     All of the time
- 
- About how many hours do you sleep on an average night?       Less than 4     4 to 5     6 to 7     8 or more
- 
- About how many times do you wake up on an average night?       0     1     2     3     4 or more
- 
- How much bodily pain have you had over the past 4 weeks?       None     Very mild     Mild     Moderate     Severe     Very severe
- 
- How often have you had bodily pain over the past 4 weeks?       None of the time     A little of the time     Some of the time     Most of the time     All of the time
- 
- Where in your body is your pain located?       Head     Arm or leg     Back     Stomach     Other: \_\_\_\_\_     No pain

14. Do you exercise or participate in sports?

- No
- Less than once a week
- 1 to 2 times a week for:     Less than 30 min     30 to 60 min     More than 60 min
- 3 or more times a week for:     Less than 30 min     30 to 60 min     More than 60 min
- Are you able to keep up with your friends when playing or participating in sports?
- Yes     No

15. Have you or your spouse/partner had any pregnancies, miscarriages, stillbirths, abortions, or live births during the past year?

- Yes     No
- If yes, describe status of pregnancy:
- Currently pregnant (Due date: \_\_\_\_\_)
- Delivered (Date: \_\_\_\_\_ Infant's birthweight: \_\_\_\_\_ Infant's sex: \_\_\_\_\_)
- C-section?     Yes     No      Premature delivery?     Yes     No
- Miscarriage     Abortion     Stillbirth

16. Have you adopted any children during the past year?

Yes  No If yes, please describe: \_\_\_\_\_

17. Has anyone in your family (parents, brothers or sisters, grandparents, aunts, uncles, and cousins) been diagnosed with any of the following during the past year?

If yes, list family member: Age:

Cancer  Yes  No \_\_\_\_\_

Diabetes  Yes  No \_\_\_\_\_

High blood pressure  Yes  No \_\_\_\_\_

Kidney disease  Yes  No \_\_\_\_\_

Heart attack  Yes  No \_\_\_\_\_

Stroke  Yes  No \_\_\_\_\_

Heart surgery  Yes  No \_\_\_\_\_

18. Do you have any other health problems or concerns that have not been addressed in this questionnaire?

Yes  No If yes, please describe: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

19. Is there anything else about your health status that you are worried about or that you would like us to know about?

Yes  No If yes, please describe: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

20. What is the primary language that you speak?

English

Spanish

Other (describe): \_\_\_\_\_

**Females only: Please continue to the next page.**

**Females only:**

21. Have you had a menstrual period during the past year?  Yes  No

If yes, date of your last menstrual period: \_\_\_\_\_

How often are your periods? Every \_\_\_\_ days

How long do your periods last? \_\_\_\_\_ days

Is your cycle:  Regular  Irregular

Is your menstrual flow:  Light  Moderate  Heavy

Are you menstruating today?  Yes  No

22. Have you had a pelvic exam, Pap smear, or breast exam in the past year?

Yes  No If yes, list date and doctor: \_\_\_\_\_

23. Do you take birth control pills or other hormones?

Yes  No If yes, list: \_\_\_\_\_

24. Do you perform breast self-examination?

No

Yes – occasionally

Yes – once a month



**Clínica de Supervivencia del City of Hope**  
*Atención postratamiento especializada para sobrevivientes de malignidades pediátricas*

**Cuestionario anual de salud – Adulto**

Nombre: \_\_\_\_\_ Edad \_\_\_\_\_ Fecha: \_\_\_\_\_

Dirección: \_\_\_\_\_

Ciudad: \_\_\_\_\_ Estado: \_\_\_\_\_ Código Postal: \_\_\_\_\_

Números de Teléfono: Casa: \_\_\_\_\_ Empleo: \_\_\_\_\_ Celular: \_\_\_\_\_

Con quien vive usted? \_\_\_\_\_

Contacto de emergencia: \_\_\_\_\_ Relación: \_\_\_\_\_ Teléfono: \_\_\_\_\_

1. Quien es su medico primario?  
(para cuidado medico de rutina, enfermedades menores)

Nombre \_\_\_\_\_

Dirección \_\_\_\_\_

Ciudad \_\_\_\_\_ Estado \_\_\_\_\_ Código Postal \_\_\_\_\_

Teléfono \_\_\_\_\_

Quien es su oncólogo?  
(médico especialista en cáncer)

Nombre \_\_\_\_\_

Dirección \_\_\_\_\_

Ciudad \_\_\_\_\_ Estado \_\_\_\_\_ Código Postal \_\_\_\_\_

Teléfono \_\_\_\_\_

2. ¿Le gustaría que enviemos un informe de esta visita as su:

- Médico primario?  Sí  No

- Oncólogo?  Sí  No

3. ¿Durante el año pasado, ha tenido un examen de salud, cirugía, o ha estado hospitalizado?

Sí  No Si es así, explique: \_\_\_\_\_

4. Por favor, escriba todos los medicamentos que usted toma regularmente (con o sin receta)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

5. Tiene usted alguna alergia?  Sí  No

Si es así, escriba una lista de las alergias:

\_\_\_\_\_

6. ¿Ha tenido usted alguna inmunización (vacuna) dentro del año pasado?

Sí  No Si es así, haga una lista de las vacunas:

\_\_\_\_\_

7. ¿Cuál es su estado civil?

Soltero/a  Comprometido/a  Casado/a  Divorciado/a  Viudo/a

8. Educación:

¿Asiste usted la escuela?  Sí  No

Si es así, ¿Cuál es el nombre de la escuela?: \_\_\_\_\_

¿Cuál es su área de estudio?: \_\_\_\_\_

Número de años usted ha estado en el programa escolar corriente: \_\_\_\_\_

¿Tiene usted algún problema académico?  Sí  No

9. Empleo:

¿Es empleado actualmente usted?  Sí  No

Si es así, ¿cuál es su ocupación?  \_\_\_\_\_

¿Cuántas horas semanales trabaja? \_\_\_\_\_

¿Cuánto hace que tiene este trabajo? \_\_\_\_\_

¿Tiene usted algún problema con su trabajo?  Sí  No

Si es así, ¿Qué problemas tiene? \_\_\_\_\_

10. Tiene usted algún seguro médico?  Sí  No

Si es así, por favor indique como usted obtiene su seguro médico:

\_\_\_ Por mi trabajo

\_\_\_ Por la escuela

\_\_\_ Por el trabajo de mi  
esposo/a o compañero/a

\_\_\_ Por una política que compré

\_\_\_ Por el trabajo de mis padres

\_\_\_ Medi-Cal o otra ayuda gubernamental

\_\_\_ De otra manera: \_\_\_\_\_

11. Durante el año pasado ha sido negado usted seguro médico por tu historia de salud?

Sí  No  No lo sé

12. ¿Tiene usted alguno de los siguientes problemas?

- Sensación frecuente de cansancio/fatiga	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Pérdida de peso inexplicable	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Aumento de peso inexplicable	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Fiebre inexplicable o sudor nocturno	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Sarpullido o cambios en la piel	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Cambios en lunar(es)	<input type="checkbox"/> Sí	<input type="checkbox"/> No	Ubicación: _____
- Algún nuevo bulto, chichón, alguna nueva inflamación	<input type="checkbox"/> Sí	<input type="checkbox"/> No	Ubicación: _____
- Aparecen moretones con facilidad	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Dolores de cabeza frecuentes	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- ¿Usa anteojos?	<input type="checkbox"/> Sí	<input type="checkbox"/> No	Último examen de la vista: _____
- ¿Usa lentes de contacto?	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Problema de la visión que no se corrige con los anteojos o los lentes de contacto	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Problema de audición	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- ¿Usa aparato para oír?	<input type="checkbox"/> Sí	<input type="checkbox"/> No	Último examen de la audición: _____
- Frecuente congestión de los senos nasales, fiebre de heno o "alergia"	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Problemas dentales	<input type="checkbox"/> Sí	<input type="checkbox"/> No	Último examen dental: _____
- Dificultad para tragar	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Bulto en el cuello	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Latidos del corazón rápidos o irregulares	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Dolor en el pecho	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Inflamación o hinchazón de los pies o las manos	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Dificultad para respirar	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Tos frecuente	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Silbido al respirar (jadeo)	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Pérdida del apetito	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Náuseas o vómitos frecuentes	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Acidez estomacal frecuente	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Dolor abdominal frecuente o intenso	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Diarrea frecuente	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Estreñimiento frecuente	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Sangre en las heces	<input type="checkbox"/> Sí	<input type="checkbox"/> No	

- Dolor o ardor al orinar	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Necesidad de orinar con frecuencia	<input type="checkbox"/> Sí	<input type="checkbox"/> No	<input type="checkbox"/> Sólo por la noche
- Sangre en la orina	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Problemas sexuales	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Acaloramientos	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Dolor de articulaciones o huesos	<input type="checkbox"/> Sí	<input type="checkbox"/> No	Ubicación: _____
- Dolor frecuente en los músculos	<input type="checkbox"/> Sí	<input type="checkbox"/> No	Ubicación: _____
- Otro dolor frecuente	<input type="checkbox"/> Sí	<input type="checkbox"/> No	Ubicación: _____
- Temblores en las manos	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Problemas de coordinación	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Ataques, convulsiones	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Mareos	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Problemas con la memoria	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Frecuente sensación de tristeza/decaimiento	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Frecuente sensación de preocupación/ansiedad	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Cambios de humor frecuentes	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- Dificultad para dormir	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- ¿Usa drogas ilegales?	<input type="checkbox"/> Sí	<input type="checkbox"/> No	Describe: _____
- ¿Fuma?	<input type="checkbox"/> Sí	<input type="checkbox"/> No	Edad de inicio: _____ Paquetes por día: _____
- ¿Fuma puros/ pipa?	<input type="checkbox"/> Sí	<input type="checkbox"/> No	¿Con qué frecuencia? _____
- ¿Mastica tabaco o lo frota contra las encías?	<input type="checkbox"/> Sí	<input type="checkbox"/> No	¿Con qué frecuencia? _____
- ¿Ha fumado alguna vez?	<input type="checkbox"/> Sí	<input type="checkbox"/> No	¿Por cuánto tiempo? _____ Fecha en que dejaste de fumar _____
- ¿Alguien en su casa fuma?	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
- ¿Usted toma cerveza, vino, licor?	<input type="checkbox"/> Sí	<input type="checkbox"/> No	
¿Si es así, cuántas bebidas alcohólicas consume en una semana media?			
	<input type="checkbox"/> Cerveza: ___latas/botellas	<input type="checkbox"/> Vino: ___copas	<input type="checkbox"/> Otras bebidas: ___
	<input type="checkbox"/> Menos de una bebida alcohólica por semana		
- ¿Cómo tasaría usted su salud generalmente?	<input type="checkbox"/> Excelente	<input type="checkbox"/> Muy Bueno	<input type="checkbox"/> Bueno
	<input type="checkbox"/> Aceptable	<input type="checkbox"/> Malo	

13. Durante las **cuartas semanas pasadas**:

- Duermo bien por la noche  Nunca  Rara vez  De vez en cuando  La mayoría del tiempo  Siempre
- Cuando me despierto, me siento descansado  Nunca  Rara vez  De vez en cuando  La mayoría del tiempo  Siempre
- Tengo suficiente energía  Nunca  Rara vez  De vez en cuando  La mayoría del tiempo  Siempre
- Mi fatiga interfiere con mis actividades diarias  Nunca  Rara vez  De vez en cuando  La mayoría del tiempo  Siempre
- ¿Cuántas horas duerme usted durante una noche media?  Menos de 4  De 4 a 5  De 6 a 7  8 o más
- ¿Cuántas veces se despierta durante una noche media?  0  1  2  3  4 o más
- Durante las cuatro semanas pasadas, su dolor corporal era:  Nada  Muy suave  Suave  Moderado  Severo  Severísimo
- ¿En las 4 semanas pasadas, con qué frecuencia ha tenido dolor corporal?  Nunca  Rara vez  De vez en cuando  La mayoría del tiempo  Siempre
- ¿Donde en su cuerpo se ubique el dolor?  Cabeza  Brazo o pierna  Espalda  Estomago  Otro: \_\_\_\_\_  Sin dolor

14. ¿Hace ejercicio o practica deportes?

- No
- Rara vez
- De 1 a 2 veces a la semana por:  menos de 30 min.  30 a 60 min.  más de 60 min.
- 3 o más veces a la semana por:  menos de 30 min.  30 a 60 min.  más de 60 min.
- ¿Puede mantener el mismo ritmo que sus amigos cuando juegas o practicas deportes?
- Sí  No

15. ¿Durante el año pasado, ha tenido usted o ha tenido su esposa/compañera algún aborto espontáneo, feto sin vida o aborto?

- Sí  No
- Si es así, describa el estado del embarazo:
- Embarazada actualmente (Fecha de parto: \_\_\_\_\_)
- Nacido (fecha: \_\_\_\_\_ peso de nacimiento: \_\_\_\_\_ sexo: \_\_\_\_\_)
- ¿Cesaría?  Sí  No ¿Parto prematuro?  Sí  No
- Aborto espontáneo  Aborto  Nacimiento sin vida

16. ¿Durante el año pasado, ha adoptado?

Sí  No Si es así, especifique: \_\_\_\_\_

17. ¿Durante el año pasado, alguien en su familia (padres, hermanos/hermanas, abuelos, tías, tíos, y primos) ha sido diagnosticado con cualquiera de los siguientes?

			<u>Si es así</u> , cual miembro de su familia:	Edad:
Cáncer	<input type="checkbox"/> Sí	<input type="checkbox"/> No	_____	_____
Diabetes	<input type="checkbox"/> Sí	<input type="checkbox"/> No	_____	_____
Alta Presión	<input type="checkbox"/> Sí	<input type="checkbox"/> No	_____	_____
Enfermedad Renal	<input type="checkbox"/> Sí	<input type="checkbox"/> No	_____	_____
Ataque de Corazón	<input type="checkbox"/> Sí	<input type="checkbox"/> No	_____	_____
Embolia	<input type="checkbox"/> Sí	<input type="checkbox"/> No	_____	_____
Cirugía Cardíaca	<input type="checkbox"/> Sí	<input type="checkbox"/> No	_____	_____

18. ¿Tiene algún otro problema médico o preocupación de su salud que no se presenta en este cuestionario?

Sí  No Si es así, especifique: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

19. ¿Hay algún otro aspecto de su estado de salud que le preocupa o sobre el que desearía que supiéramos?

Sí  No Si es así, especifique: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

20. ¿Cuál es la lengua primaria que usted habla?

Inglés

Español

Otra (especifique): \_\_\_\_\_

**MUJERES SOLO: POR FAVOR SIGA A LA PÁGINA SIGUIENTE.**

**MUJERES SOLO:**

21. ¿Ha tenido usted una menstruación durante el año pasado?  Sí  No

¿Si es así, cuál era la fecha de su menstruación pasado?: \_\_\_\_\_

¿Con que frecuencia son sus menstruaciones? Cada \_\_\_\_ días

¿Cuánto duran sus menstruaciones? \_\_\_\_ días

Su ciclo es:  Regular  Irregular

Su flujo menstrual es:  Leve  Moderado  Abundante

¿Menstrúa usted hoy?  Sí  No

22. ¿Le ha hecho un examen pélvico, Papanicolaou o un examen de senos en el último año?

Sí  No Si es así, marque la fecha y el doctor: \_\_\_\_\_

23. ¿Toma usted píldoras contraceptivas o otras hormonas?

Sí  No Si es así, especifique: \_\_\_\_\_

24. ¿Hace usted el auto-examen de senos?

No

Sí – de vez en cuando

Sí – una vez al mes

# LETTERS

## APPOINTMENT LETTER

*Helen DeVos Children's Hospital  
Grand Rapids, MI*

**After-Care and Transition Program**  
Division of Pediatric Hematology/Oncology  
Blood & Bone Marrow Transplantation  
(616) 391-2238

«FirstName» «LastName»  
«Address1»  
«City» «State» «PostalCode»

Dear «FirstName»,

Welcome to the After-Care and Transition (ACT) clinic. Staffed by a team of specialists consisting of a physician, physician assistant or nurse practitioner, nurse, medical social worker and child psychologist, our clinic is dedicated to the care of long-term survivors of childhood cancer. An appointment in the ACT Clinic signifies that you have reached an important milestone.

Your child has an appointment scheduled for:

«Appointment»

«DiagTesting»

«DiagTesting2»

«DiagTesting3»

**Where Do I Go?**

Patients are seen in Suite #203 of the Women's & Children's Center at 330 Barclay, across the street from the spectrum Health-Butterworth Emergency Room. Parking is available free of charge. Please stop at the laboratory located on the first floor of our building for any necessary blood work, and take the elevator to the second floor for your appointment with our ACT Clinic staff.

**What is the ACT Clinic?**

The ACT Clinic provides a comprehensive assessment, education resources, and a treatment summary specific to the individual survivor. We will review your individual medical history, previous treatment, and current state of health. Following completion of the clinical assessment and receipt of available test results from the day, the physician and nurse practitioner/physician assistant will have an in-depth discussion with you and your family to discuss current and /or potential health concerns. Recommendations are made regarding continued follow-up care and at what point transition to an adult primary care provider will occur. Wellness education is a key part of this discussion. A folder containing general and individualized educational material will be given to you on the day of your clinic appointment. A complete treatment summary letter including a problem list and plan is sent to the primary doctor, all consultants, and to you/your family for your personal records.

**What Else Should I Know?**

We are dedicated to providing the best care for each of our patients. This specialty clinic is held only one day each month, and every patient receives an extensive comprehensive visit. *It is very difficult to reschedule patients because of the limited number of available appointments, so please make every effort to keep your appointment.* If you have questions regarding this, please call Colleen Gardner at the number listed below.

**Please call (616) 391-2238 or send an email to [colleen.gardner@spectrum-health.org](mailto:colleen.gardner@spectrum-health.org) as soon as possible to confirm your appointment.**

We look forward to seeing you!

The ACT Program Staff  
David R. Freyer, D.O.  
Michele VanSoelen, RN, BSN  
Colleen Gardner, RN  
Scott Hawkins, MSW  
Steve Pastyrnak, PhD

## **APPOINTMENT LETTER**

***Cook Children's Hospital  
Fort Worth, TX***

  
**CookChildren's**  
Hematology & Oncology Center  
901 Seventh Avenue, Suite 220  
Fort Worth, Texas 76104-2724  
(682) 885-4007  
www.cookchildrens.org

**Life After Cancer Program**

Jeffrey C. Murray, M.D.    Lisa Bashore, M.S., R.N., C.P.N.P.  
Medical Director            Program Coordinator

*The Life After Cancer Program is a project of Cook Children's and the Lance Armstrong Foundation, a non-profit organization founded by cancer survivor and cycling champion Lance Armstrong.*

Dear \_\_\_\_\_,

We currently have you scheduled for a LACP appointment in the Hematology & Oncology Clinic at \_\_\_\_am/pm on \_\_\_\_\_, \_\_\_\_\_ 2007.

Other procedures scheduled on the same day or on \_\_\_\_\_ are:

CT of \_\_\_\_\_ at \_\_\_\_\_ EKG/ECHO at \_\_\_\_\_

MRI of \_\_\_\_\_ at \_\_\_\_\_ Bone Density at \_\_\_\_\_

Neuropsychological Testing on \_\_\_\_\_

Other \_\_\_\_\_

If you need to reschedule this appointment, please contact my office at (682) 885-6451.

Thank you,

Laurie Bailey  
Life After Cancer Program

**APPOINTMENT REMINDER LETTER  
(ENGLISH & SPANISH)**

***Cook Children's Hospital  
Fort Worth, TX***



**Hematology & Oncology Center**

901 Seventh Avenue, Suite 220  
Fort Worth, Texas 76104-2724  
(682) 885-4007  
www.cookchildrens.org

**Life After Cancer Program**

Jeffrey C. Murray, M.D.    Lisa Bashore, M.S., R.N., C.P.N.P.  
Medical Director            Program Coordinator

*The Life After Cancer Program is a project of Cook Children's and the Lance Armstrong Foundation, a non-profit organization founded by cancer survivor and cycling champion Lance Armstrong.*

Dear \_\_\_\_\_,

We just wanted to remind you of your appointment in the Hematology & Oncology Clinic at \_\_\_\_\_am/pm on \_\_\_\_\_, \_\_\_\_\_ 2006.

Other procedures scheduled on the same day or on \_\_\_\_\_are:

CT of \_\_\_\_\_ at \_\_\_\_\_ EKG/ECHO at \_\_\_\_\_  
MRI of \_\_\_\_\_ at \_\_\_\_\_ Bone Density at \_\_\_\_\_  
Neuropsychological Testing on \_\_\_\_\_  
Other \_\_\_\_\_

A nurse from that office should call you if any preparations are necessary. Other special instructions: \_\_\_\_\_

Our records indicate you have \_\_\_\_\_ insurance, policy number \_\_\_\_\_ / group number \_\_\_\_\_. Please verify that this information is correct. If it is incorrect, please contact me, Laurie, at (682) 885-6451. Please bring your current insurance/Medicaid card to your visit. We will need to make a copy to update the chart.

If your insurance requires a written referral from your primary care physician, please call that office and obtain a current referral before your scheduled appointment date.

If you are unable to make this appointment or you have any questions or concerns, please contact our office at (682) 885-6451.

Thank you,

Laurie Bailey  
Life After Cancer Program



**Clinica de Hematología & Oncología · Programa de Vida Después del Cancer**

901 Seventh Avenue, Suite 220  
Fort Worth, Texas 76104-2724  
(682) 885-4007  
www.cookchildrens.org

Jeffrey C. Murray, M.D.    Lisa Bashore, M.S., R.N., C.P.N.P.  
Director Médico            Coordinadora del Programa

*El Programa de Vida Después del Cancer es un proyecto de Cook Children's y la Fundación Lance Armstrong, una organización no lucrativa fundada por el sobreviviente de cancer y campeón de ciclismo Lance Armstrong.*

Estimado Padre/Madre,

Solo queremos recordarle de la cita para \_\_\_\_\_ en la Clínica de Hematología & Oncología a las \_\_\_\_\_ am/pm el \_\_\_\_\_, \_\_\_\_\_ 2006.

Otros procedimientos programados para el mismo día o para el \_\_\_\_\_ son:

CT de \_\_\_\_\_ a las \_\_\_\_\_ Densidad de huesos a las \_\_\_\_\_

Electrocardiograma/Eco a las \_\_\_\_\_ MRI de \_\_\_\_\_ a las \_\_\_\_\_

Examen Neuropsicólogo el \_\_\_\_\_

Otro \_\_\_\_\_

Una enfermera de esa oficina le hablara si se necesita cualquier preparación.

Otras intruccionnes especiales: \_\_\_\_\_

Nuestros expedientes indican que usted tiene la aseguranza \_\_\_\_\_, número de poliza \_\_\_\_\_ / número de grupo \_\_\_\_\_. Por favor revise que esta información es correcta. Si no esta correcta, por favor hableme, Laurie, al (682) 885-6451. Por favor traiga su tarjeta actual de su aseguranza/Medicaid a su visita. Necesitaremos hacer una copia para actualizar su expediente.

Si su aseguranza requiere una referencia escrita de su doctor primario de cuidado, por favor llame a esa oficina y obtenga una referencia actual antes de la fecha de su cita.

Si usted no puede venir a esta cita o tiene cualquier pregunta o preocupación, por favor hable a nuestra oficina al (682) 885-6451.

Gracias,

Laurie Bailey  
Programa de Vida Después del Cancer

**AUTHORIZATION LETTERS  
(STATE FUNDED PROGRAM)**

***Pediatric and Adolescent Hematology-Oncology  
Associates/Miller Children's Hospital  
Long Beach, CA***

**PEDIATRIC AND ADOLESCENT  
HEMATOLOGY-ONCOLOGY  
ASSOCIATES**

2653 ELM AVENUE, SUITE 200  
LONG BEACH, CALIFORNIA 90806  
OFFICE (562) 492-1062  
FAX (562) 595-5296

JERRY Z. FINKLESTEIN, M.D., C.M., F.A.A.P.  
PAULA K. GRONCY, M.D., F.A.A.P. INC.  
RAMESH PATEL, M.D., F.C.P., F.A.A.P.

**REQUEST FOR CCS AUTHORIZATION FOR LATE EFFECTS FOLLOW-UP**

Date: \_\_\_\_\_

RE: \_\_\_\_\_

CCS# \_\_\_\_\_

California Children's Services  
9320 Telstar Street  
Suite 226  
El Monte, CA 91731

Mailing Address \_\_\_\_\_  
\_\_\_\_\_

Dear Ladies and Gentlemen:

\_\_\_\_\_ is a patient with acute lymphocytic leukemia who is followed for long-term surveillance and complications related to his/her diagnosis and treatment. It is imperative to follow this patient routinely with periodic evaluations including audiograms, eye evaluations, endocrinology evaluations, gynecological evaluations, speech and language evaluations, and other screening in order to diagnose late effects related to treatment so that appropriate interventions and follow-up may be initiated. Since this patient received TBI (total body irradiation) he/she is at risk for various late effects including gonadal failure, cataract development, hypothyroidism, cardiac complications, pulmonary fibrosis. The following services are requested at this time:

- Audiogram to be performed at Long Beach Memorial Medical Center, Audiology Department, 2801 Atlantic Avenue, Long Beach, CA 90801.
- Ophthalmologic Consultation (Family Eye Medical Group: Drs. Andrew Choy, Teresa Rosales, Robert Clark) 4100 Long Beach Blvd Suite 108, Long Beach, CA 90807.
- Speech and Language (Evaluation and Treatment), Miller Children's Hospital, 2801 Atlantic Avenue, Long Beach, CA 90801.
- Physical Therapy (Evaluation and Treatment), Miller Children's Hospital, 2801 Atlantic Avenue, Long Beach, CA 90801.
- Endocrinology Consultation (Dr. Mario Brakin and Associates), 2650 Elm Avenue, Suite 101, Long Beach, CA 90806.
- Other: \_\_\_\_\_

Your expeditious authorization of these requests is most appreciated.

Sincerely,

**PEDIATRIC AND ADOLESCENT  
HEMATOLOGY-ONCOLOGY  
ASSOCIATES**

2653 ELM AVENUE, SUITE 200  
LONG BEACH, CALIFORNIA 90806  
OFFICE (562) 492-1062  
FAX (562) 595-5296

JERRY Z. FINKLESTEIN, M.D., C.M., F.A.A.P.  
PAULA K. GRONCY, M.D., F.A.A.P. INC.  
RAMESH PATEL, M.D., F.C.P., F.A.A.P.

**REQUEST FOR CCS AUTHORIZATION FOR LATE EFFECTS FOLLOW-UP**

Date: \_\_\_\_\_

RE: \_\_\_\_\_

CCS# \_\_\_\_\_

California Children's Services  
9320 Telstar Street  
Suite 226  
El Monte, CA 91731

Mailing Address \_\_\_\_\_

Dear Ladies and Gentlemen:

\_\_\_\_\_ is a child with a malignant brain tumor who is followed for long-term surveillance and complications related to his/her diagnosis and treatment. It is imperative to follow this patient routinely with periodic evaluations including MRI scans of the brain and spine, audiograms, eye evaluations, endocrinology evaluations, speech and language evaluations, and other screening in order to diagnose late effects related to treatment so that appropriate interventions and follow-up may be initiated. Additionally, comprehensive neuropsychological testing is periodically necessary to accurately document the patient's deficits sustained from the tumor itself or treatment received (radiation, surgery or cranial radiation). This will allow for necessary resources to be obtained at school as well as to monitor the response to therapeutic interventions. The following services are requested at this time:

- MRI of the Brain and Spine: with and without contrast to be performed at: Memorial MRI. 403 East Columbia, Long Beach, CA 90801.
- Audiogram to be performed at Long Beach Memorial Medical Center, Audiology Department, 2801 Atlantic Avenue, Long Beach, CA 90801.
- Ophthalmologic Consultation (Family Eye Medical Group: Drs. Andrew Choy, Teresa Rosales, Robert Clark) 4100 Long Beach Blvd Suite 108, Long Beach, CA 90807.
- Speech and Language (Evaluation and Treatment), Miller Children's Hospital, 2801 Atlantic Avenue, Long Beach, CA 90801.
- Physical Therapy (Evaluation and Treatment), Miller Children's Hospital, 2801 Atlantic Avenue, Long Beach, CA 90801.
- Endocrinology Consultation (Dr. Mario Brakin and Associates), 2650 Elm Avenue, Suite 101, Long Beach, CA 90806.
- Comprehensive Neuropsychological Testing to be performed by Teddi Soffley, PhD, 201 Atlantic Avenue, Long Beach, CA 90801.
- Other: \_\_\_\_\_.

Your expeditious authorization of these requests is most appreciated.

Sincerely,

## **POST-CLINIC LETTER TO PATIENT**

***Carolinas Medical Center  
Charlotte, NC***

## POST CLINIC LETTER TO PATIENT

Date \_\_\_\_\_

Dear *(patient)*

It was a pleasure seeing you in the *Children's Specialty Center* for our Long-term Follow-up clinic. We hope you found this visit useful and had the opportunity to ask questions related to your disease and treatment.

Your lab work showed \_\_\_\_\_

Your echocardiogram showed \_\_\_\_\_

*(List all other pertinent tests results)*

The healthcare providers who met with you have discussed your case and have made suggestions concerning your healthcare. These are as follows:

*We get this info, from own knowledge, experience, standards, and the COG guidelines for late effects . The following example is for a patient seen with Hodgkin's Disease*

- Report to us any chest pain, shortness of breath, swelling of feet and ankles, increasing fatigue. We recommend an EKG/Echocardiogram every 2 years or sooner if symptoms indicate.
- Report frequent coughing or wheezing, frequent lung infections such as bronchitis or pneumonia, or if you become easily fatigued or short of breath during mild exercise.
- **Notify your doctor of Bleomycin therapy prior to any general anesthesia**
- If you have any concerns about complications after cancer treatment that may be causing feelings of anxiety or depression, please share these concerns with us or your primary care physician.
- Continue Synthroid at 125 mcg. Notify us for symptoms of low thyroid (see handout given to you on day of visit)

*Frequency of echos, PFT, etc*

*List name and contact of any community referrals*

Your continued health is important to us! Therefore, in an effort to minimize the potential complications of your disease and treatment, we recommend a return visit to *(name of our clinic)* on *(date of return visit)*.

During your visit I gave you a summary of your treatment for you to keep. Enclosed is a medical summary for your records and it includes medical terminology that may be unfamiliar to you. This summary is for you to share with your doctors now and in the future. A separate letter summarizing your physical exam, lab results, and recommended follow is being sent to your primary care doctor.

Please contact any member of our health care team for question or concerns about your visit or the information given to you. The phone number is \_\_\_\_\_. We look forward to seeing you again next year.

Sincerely,

\_\_\_\_\_

## **POST-CLINIC LETTER TO PHYSICIAN**

*University of Michigan*  
*Ann Arbor, MI*

Dr.  
XXXXXXXXXX  
XXXXXXXXXX

Dear Dr. \_\_\_\_\_,

We had the pleasure of seeing your patient, xxxxxxxx, in the Long Term Follow Up Clinic at the University of Michigan Comprehensive Cancer Center today, March \_\_\_\_\_, 200. The Long-Term Follow-up clinic is designed to meet the needs of adolescents and adults who were diagnosed with a malignancy in childhood, and are now five years off all therapy. I will briefly summarize \_\_\_\_\_'s history and treatment at the University of Michigan, and provide our team's recommendations.

**PAST HISTORY:** This includes presentation signs and symptoms, diagnostic scans and laboratory work, staging and/ or phenotype, markers, chromosomes. Decision making re. Protocol selection. Name and number of study. CCG patient ID #; Summary of drugs used, including cumulative dosage. Surgical history, XRT history, transfusion summary. Date off therapy, problems off chemo. Chronic medical conditions.

**FAMILY CANCER HISTORY:**

**SOCIAL HISTORY AND CURRENT STATUS:** education summary, occupation, interests, married, pregnancies; Include both health and life insurance status

**INTERVAL HISTORY:** Current medical/ emotional issues since last visit

**PHYSICAL EXAM:** include ht/wt and percentiles; include thyroid, ophth (cataracts) and Tanner stage among other pertinent findings

**CURRENT MEDICATIONS:** include doses

**LABORATORY TESTS FROM TODAY'S VISIT:**

**ISSUES TO CONSIDER:** In consultation with the long-term follow up clinic team, the following items/potential problems were identified: [Examples]

1. History of xxxxxxxx
2. History of steroid use
3. History of anthracycline use; total cumulative dose of 450mg/m<sup>2</sup>
4. Obesity

**Recommendations:**

1. continued yearly visits in the LTFU clinic; **or** continued follow up with Dr. \_\_\_\_\_. We will be available for consultation or support if needed in the future.
2. Calcium/Vitamin D supplementation
3. EKG/Echocardiogram tests every 3-5 years, and prior to general anesthesia. Furthermore, we discourage participation in isometric exercise, such as weight lifting, push and pull-ups, and wrestling.
4. High fiber and low fat diet, with increased aerobic exercise program.

We enjoyed seeing \_\_\_\_\_ in the LFTU clinic today. During our discussion, we also reinforced the use of sunscreen on a daily basis, and regular breast/testicular exam, as well as following a healthy life style that includes regular physical activity and a high fiber, low fat, calorically appropriate diet.

Should you have any questions or concerns, please do not hesitate to contact us at 734.936.9814.

Sincerely,

## **POST-CLINIC LETTER TO PHYSICIAN**

***UCSF***  
***San Francisco, CA***

DEPARTMENT OF PEDIATRICS  
CHILDREN'S CANCER AND BLOOD DISEASES PROGRAM  
505 Parnassus Avenue  
M-649, Box 0106  
San Francisco, California 94143-0106  
Office: (415) 476-3831 Fax: (415) 502-4372

**Survivors of Childhood Cancer Program**

September 3, 2007

MDFirst MDLast MD  
Address1  
Address2  
City, State ZIP

RE: PtName PtLastName  
U#: PtMRN  
DATE OF BIRTH: PtDOB  
DATE OF SERVICE: PtDOS

Dear Dr. MDLast:

We had the pleasure of seeing your patient, PtName, in the UCSF Survivors' Clinic today. The following is a summary of your patient's cancer, therapy, current history, and physical findings, followed by an assessment and long-term follow-up recommendations.

Click here and Paste Cancer Info

**Significant Complications:**

**Therapy Summary:**

Protocol:	On Study?	Initiated	Completed
Click Here and Paste Protocol Information			
Chemotherapy	Route 1st Dose Age	Dose	# Cumulative Dosage
Click Here and Paste Chemotherapy Information			
Surgical Procedure	Site	Date	Surgeon
Click Here and Paste Surgical Procedure Data			
Radiation	Date Started	Date Completed	Site Dose
Click Here and Paste Radiation Data (If None, Delete all words except "Radiation" and put "Radiation: None")			

**Interval History:**

**Past Medical Problems:**

Click Here and Paste Problem List (Including Header) (Delete if None)

**Immunization Status:**

**Current Medications/Supplements:**

**Allergies:**

**Review of Systems:** An extensive review of systems identified

**Social History:**

**Family History:**

**Physical Examination**

**Vitals:**

**Temp:** \_\_\_\_\_ **HR:** \_\_\_\_\_ **BP:** \_\_\_\_\_ **Ht:** \_\_\_\_\_ **Wt:** \_\_\_\_\_ **Karnofsky:** \_\_\_\_\_

**General Appearance:** PtName is a healthy-appearing Age-year-old male in no apparent distress.

**HEENT:** Head: normocephalic, atraumatic.  
Eyes: PERRLA; EOMI; conjunctivae clear, sclerae white; Fundi with sharp disc edges and no significant pathology.  
Mouth: oropharynx is normal; MMM, no breakdown; teeth in good repair.  
Ears: canals clear; TMs pearly gray with normal landmarks; hearing grossly normal.  
Nose: nares patent, turbinates pink.

**Neck:** Supple, full ROM, no adenopathy or thyromegaly.

**Lungs:** Clear to auscultation bilaterally.

**Cardiac:** Regular rate and rhythm, without murmur; radial and femoral pulses 2+.

**Abdomen:** Soft, non-tender, no hepatosplenomegaly or masses noted. Normal bowel sounds.

**Back:** No spinal or CVA tenderness, no evidence of scoliosis.

**GU:** Normal (**un**)circumcised male, both testes descended//Normal female, no lesions or d/c noted, Tanner Tanner Stage Here.

**Extremities:** Full range of motion of all extremities; spine straight. No cyanosis or edema.

**Neurologic:** Cranial nerves II-XII grossly intact; motor strength is 5/5 throughout; reflexes 2+ UE/LE. Gait normal. Romberg negative.

**Skin:** Warm, dry, no significant rashes, lesions, or prominent birthmarks noted.

**Lymph Nodes:** No cervical, supraclavicular, axillary, inguinal adneopathy.

**Assessment and Long-Term Follow-Up Recommendations:**

- 1. Risk of Recurrence:**
- 2. Psychosocial Effects:** Any child who has been treated for cancer can have some ongoing psychosocial effects. These can include depression, anxiety, social withdrawal or educational difficulties. At this time, by clinical interview, there is no evidence of significant neuropsychological problems. The guidelines recommend annual assessment and referral as needed for psychological testing.
- 3. Limitations in health care and insurance access:** Because of the diagnosis of cancer, there is a risk of exclusion from health insurance in the future. It is important to assess ongoing health care needs and advocate for appropriate health care coverage.
- 4. Establish relationship with primary health care provider:** National guidelines recommend that all survivors of childhood cancer establish a relationship with a community healthcare provider. Annual routine check-ups are essential for maintaining good health. A primary care provider can help detect any long-term sequelae and can assist in maintaining a relationship with your primary oncologist so that long-term follow-up guidelines are observed.
- 5. Dental abnormalities:** Patients who have undergone chemotherapy are apt to have some increased risk for dental anomalies. PtName should have dental exam and general cleaning every six months per recommendations of the COG guidelines.
- 6. Risk of cardiac toxicity:** Patients treated with anthracycline antibiotics have been shown to be at higher risk for cardiac defects. Because of his/her prior therapy with **doxorubicin (and) daunomycin**, PtName requires detailed history of exertional tolerance on an annual basis. He/She should have a baseline EKG and echocardiogram now and then an echocardiogram yearly/every X years, per the COG guidelines, based on the dose of anthracycline and age at which it was administered.
- 7. Risk of kidney damage:** PtName should have an annual physical examination, including a urinalysis and blood pressure monitoring. In addition, we recommend the following baseline labs: BUN, creatinine, electrolytes and urinalysis. His/Her risk for developing renal toxicity at this point is unlikely, but if he/she has other renal insults, he/she may be more sensitive in the future.
- 8. Risk of neurologic toxicity:** Because of his/her prior exposure to **vincristine**, PtName could be at risk for peripheral nerve, sensory or motor neuropathy. At this time, his/her sensory, motor and reflexes are normal, and I would not expect that he/she would develop further problems. He/She has no signs of vasospastic attacks (or Raynaud's phenomenon) that can be associated with vincristine therapy. A neurologic exam should be performed during every physical exam.
- 9. MALE Issues related to infertility:** PtName received a substantial amount of **cyclophosphamide (and) doxorubicin (and) daunomycin**, which can be associated with oligospermia/azoospermia. We recommend testing an LH, FSH, and testosterone now and as clinically indicated, per the COG guidelines. We recommend assessment of sperm count (**at maturity**) if he is interested in knowing the effect on his sperm production.
- 10. FEMALE Issues related to infertility:** PtName received a substantial amount of **cyclophosphamide (and) doxorubicin (and) daunomycin**, which can be associated with hypogonadism, delayed puberty, infertility, or early menopause. We recommend testing an LH, FSH, and estradiol level now and as clinically indicated, per the COG guidelines.
- 11. Risk of secondary malignancy:** Because of his/her prior therapy with **cyclophosphamide (and) doxorubicin (and) daunomycin**, PtName may be at risk for hematologic malignancies. We would recommend annual assessment and a complete blood count yearly until 20xx. **\*\***Also, because of PtName's cumulative dose of **cyclophosphamide (in combination with radiation therapy)**, he/she is at higher risk for a bladder malignancy and should be monitored yearly with a urinalysis. **\*\***Additionally, because of PtName's **radiation therapy**, he/she is at higher risk for a bone malignancy, and should have a yearly assessment and exam of the irradiated area.

- 12. Risk of bladder injury:** Because of his/her prior exposure to **cyclophosphamide (and) ifosfamide**, he/she is at risk of developing hemorrhagic cystitis, bladder fibrosis, and/or dysfunctional voiding. We recommend a yearly urinalysis and a voiding history.
- 13. Learning/Memory:** Because of PtName's exposure to **intravenous (and) intrathecal** chemotherapies (**methotrexate, hydrocortisone, cytarabine**), he/she is at risk of developing neurocognitive difficulties. A formal neurocognitive evaluation is recommended per the COG Guidelines. He/She should also have a yearly verbal assessment of his/her educational/vocational progress.
- 14. Risk of lung injury:** Because of his/her prior therapy with alkylating agents, such as **Busulfan**, he/she can have subclinical lung injury. A baseline chest x-ray and pulmonary function tests are recommended.
- 15. Risk of bone damage:** Because of his/her prior therapy with **prednisone/dexamethasone (and) methotrexate**, he/she is apt to have risk for osteopenia. We would recommend a baseline DEXA scan at 18 years of age.
- 16. Risk of eye toxicity:** Because of his/her prior treatment with **prednisone/dexamethasone**, PtName is at risk of developing cataracts. We recommend a yearly eye examination, including visual acuity and fundoscopic exam, per the COG Guidelines.
- 17. Risk of hearing loss:** All patients treated with heavy metal agents, such as **cisplatin/carboplatinum**, are at risk for high-frequency hearing loss. **\*\*PtName** was noted to have hearing loss due to therapy with **cisplatin/carboplatinum**. PtName should have hearing monitored yearly with a history and physical examination. A baseline audiogram should be performed at entry into LTFU and, if abnormal, followed yearly until stable.
- 18. Risk of liver toxicity:** While acute liver toxicities predominate from treatment with **methotrexate**, some long-term sequelae have been noted, and therefore we do recommend periodic evaluation of liver function, specifically serum ALT, AST, and bilirubin. If these labs are normal at entry into long-term follow-up, then they only need to be repeated as clinically indicated.

**Education:**

As part of his/her long-term follow-up evaluation, PtName received HealthLinks describing risks of secondary malignancies, risk of cardiac health, issues related to infertility, issues related to kidney damage, and other HealthLinks from the Children's Oncology Group website. The website is [www.survivorshipguidelines.org](http://www.survivorshipguidelines.org). PtName also received a Survivor's Healthcare Passport, which summarizes his/her therapy and recommended follow-up on a "credit card," which he/she can keep with him/her.

**Recommended baseline examinations for entry into long-term follow up:**

System	Baseline Examinations	Comments
<a href="#">Click Here and Paste Baseline Examinations</a>		

**Recommended routine follow-up examinations:**

System	Tests	Time Frame	Comments
General	History/Physical	Yearly	
Dental	Exam/Cleaning	Twice yearly	

[Click Here and Paste Recommended Routine Follow-Up Examinations](#)

**Follow-Up:**

It was a pleasure to see PtName in the Survivors' Clinic. We certainly appreciate the opportunity to participate in your patient's care. If you have any questions, please do not hesitate to contact us. We ask that PtName return to the Survivors' Clinic every five years after therapy.

Sincerely,

Robert E. Goldsby, M.D. // Arthur R. Ablin, M.D.  
Associate Professor of Pediatrics // Professor Emeritus of Pediatrics  
Director, UCSF Survivors of Childhood Cancer Program // Pediatric Hematology/Oncology  
Pediatric Hematology/Oncology //

Aimee Sznewajs, RN, PNP // Katie Aaronson, CPNP // Daniel Hill // Shannon Bowes  
Pediatric Oncology Nurse Practitioner // Pediatric Hematology/Oncology  
Coordinator, UCSF Survivors of Childhood Cancer Program //

Please fax copies of all drug administration and/or office visits to (415) 502-4372.

CARBON COPIES:       Dr.  
                                  UCSF Pediatric Oncology

PtName  
Address  
City, State ZIP

# LONG-TERM FOLLOW-UP PROGRAM RESOURCE GUIDE



**CureSearch**  
Children's Oncology Group