Technology and the face of medical care have changed the doctor-patient relationship. Although the medical team has expanded and often includes multiple physicians with different specialties, many other health care professionals, insurance companies, health maintenance organizations and electronic medical records, you still need one physician to “quarterback” treatment and oversee care. You also need a quality relationship between the patient and care-giver that leads to the patient feeling both cared for and cared about. Changes in health care have led to a depersonalization of the physician-patient relationship (e.g., many treatment decisions being made in larger contexts, such as team meetings and utilization review boards as well as the coming of age of the electronic medical record).

When cancer is diagnosed, the life-threatening or life-altering reality of the disease creates an existential crisis and a need for reassurance, positive action, and outstanding medical care. These needs are ongoing throughout the management of cancer. There are a number of specific issues that can enhance the quality of the doctor-patient relationship. They are:

Communication
One of the most important components of any good relationship is having open and honest communication from the beginning. I wish that all physicians would ask their patients at their first meeting, “How would you like us to work together?” thereby establishing an open dialogue about the relationship. Unfortunately, this is not the typical practice. Each physician has his or her own style, as do patients. I recommend that, as the patient, you should initiate a discussion with your physicians, whether it is your primary care physician or one of your many specialists, about how to work together. Patients can and should communicate with their physicians what they want from the relationship and what they feel are the important components. This allows both parties to set appropriate expectations, clarify needs and policies and, hopefully, establish a relationship that works for both parties.

Here are some of the qualities that many patients look for in their physicians and health care providers:

- **knowledge about your condition and ways to treat, problem-solve and effectively manage symptoms and your diseases;**
- **an ability to communicate warmth, empathy, compassion, and concern;**
- **an ability to listen to your experiences and perspective;**
- **an ability to explain medical issues in non-technical words;**
- **a willingness to spend time with you and to answer all your questions;**
- **a willingness to consider how you experience the treatment or side effects as an individual;**
- **an ability to communicate effectively with your family or other members of your support system;**
- **an openness to other complementary approaches that you might also be using and a willingness to talk with your complementary providers to assure your well-being and safety;**
- **a willingness to include you in the decision-making;**
- **a willingness to make decisions when you do not feel comfortable making them.**

It also is important to find out what expectations the doctor has for you. Some expectations that you may want to clarify include:

- **When should you come in for an appointment to discuss side effects or new problems?**
- **How much does the doctor want you to share your feelings about the cancer and its treatment?**
- **How much does the doctor want to communicate with your family members?**
- **Does the doctor expect you to ask questions when you want information, or will s/he provide what s/he thinks is appropriate?**

The relationship between a physician and a patient is unique. Built on faith and trust, it is often entered into with little dialogue about what is expected and with little or no history before the relationship must begin to manage life-threatening events.
• Does your physician share your beliefs about complementary medicine and do they want to know what you might be doing in addition to your traditional Western medical care?

Preparation for Visits with Your Doctor

More than ever before, doctors seem to have less time and, in fact, many have greater demands on their time than ever before. Further, there is more information available to patients through a myriad of sources and thus, patients often need more information and clarification of issues than ever before. It is important to be prepared for your visits with your doctor to maximize your time with this valuable resource. Because visits to any physician can produce anxiety, and patients often feel rushed, it is common to forget to ask the most important questions. I recommend the following strategy:

• Prior to your visit, take a few moments to think about its purpose;
• Identify the issues that you want to discuss or about which you want to obtain information;
• Write down a list of your questions (VERY IMPORTANT);
• Write down any symptoms and/or side effects that you are experiencing;
• Write down any problems that you have had, including psychological and physical ones;
• Try to avoid being embarrassed or shy about asking questions about your own body.
• No question about something bothering you is a “dumb” question.
• Tell your doctor in advance that you have a list of questions to be answered and ask the most important ones first.
• If you do not understand the answer, don’t nod your head as if you do. Ask your doctor to re-explain things that you don’t understand. If you don’t get an answer, rephrase the question and ask again. It can sometimes help to tell your doctor that you want to explain what you heard and ask them to correct any misinformation that you have.
• If something goes awry, it is essential that you discuss it with your doctor.
• Keep a positive tone in your voice. Let your doctor know that you understand how busy he or she is but that you need this expertise to understand what is happening to you. Most doctors are sympathetic to this approach.

Managing Difficult Situations

Despite the best plans, sometimes a patient and a doctor or other health professional fail to communicate effectively, and one or both people feel let down. These are the times when communication is needed the most.

Patients can be reluctant to bring their concerns to their physician. They sometimes fear that their doctor will become angry and will abandon them. While these are legitimate concerns, which many people have, they should not keep you from talking to your doctor if something has gone wrong. If you feel uncomfortable with the way in which your medical team communicated or behaved, your ability to work together as a team will be impaired. Everyone can have difficult days and sometimes you need to try again. It may be helpful to take someone with you who can help by giving you moral support and also may help you explain your needs.

If something goes away, it is essential that you discuss what happened, how you felt and how you would have wanted it to have been handled. If you have this discussion, it helps to approach it with an openness to try again. Being hostile with anyone, let alone your physician, can make that person feel defensive and, thus, may not help you get what you need. Being able to repair a relationship that is not functioning well can lead to a deeper and more satisfying relationship between you and your physician. In order to do this, both of you will need to approach problems in a calm and non-judgmental manner.

The best way to facilitate the conversation and to reduce the likelihood of defensiveness is to make a statement that reminds both you and your physician of the ways in which you really have enjoyed or benefited from working together. Starting in this way can communicate to your physician that you value the relationship and want to make it stronger. For example, one of these statements might be a good beginning:

• I chose you as my physician because I really like the way you did…
• I have always appreciated how honest you have been with me…
• I really respect that fact that you know this cancer and have offered me the best treatments available…

After stating something positive about your relationship you can then begin discuss something that did not work well and why you would like that not to occur again. A good way to avoid hurting others is to use statements that describe what happened and to say what the impact was on you. Sentences starting with “I” generally are non-threatening. For example:

• “I was not happy when…”
• “I do not feel that we worked well as a team when I was hospitalized.”

If you are having difficulties communicating effectively with someone in your medical environment, feel free to consult with someone at the Center to help you develop a plan.

• Create a list of your medications and any medication allergies to provide to your medical team, including any supplements you are or want to take;
• Make a list of any prescriptions that you need filled;
• If you have a smart phone, download a free application before the visit that will allow you to record your visit with your physician.

If your physician will allow you to record your visit, it will allow you to listen to the visit again as well as play it for friends and family eager to hear about what your physician said or recommended. Playing this back for you and your family and friends will help you to integrate and understand what your physician has told you. Research indicates that this is a powerful, effective, and satisfying technique for patients. Not all physicians know about this research and may be reluctant to have you record your session. Ask permission first, and explain why you need to do this. It will save the physician time because his or her message will be better understood by both you and your family.

Remember that you are often the only source of information for your physician. He or she must rely upon your reports to make decisions about what is effective or not. Be sure you bring up all physical symptoms that you are experiencing as well as any changes in your moods and feelings.

Getting Your Questions Answered

It is important that you have your questions answered. You may need to be persistent. Here are a few pointers to keep in mind:

• “I would like you to know how I was affected when you said … and I really want to be able to work better together in the future”

Make it clear that you are also open to hearing how the other person might have experienced what you are discussing and try to communicate that you are interested in having things go differently in the future. This honest and open communication can create a better level of understanding so that problems can be avoided in the future.

It may help to have a family member or friend with you to provide support as you try to build a better relationship with your physician. When concerns are brought into the open, the relationship usually becomes stronger and better.

Always keep in mind that our Center is available to you and that our staff tries to facilitate good relationships between patients and the medical environment. We are open to talking to you about your experiences and helping you problem-solve the next steps. If you are having difficulties communicating effectively with someone in your medical environment, feel free to consult with someone at the Center to help you develop a plan.

Anne Coscarelli, Ph.D.
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A dolescents and young adults, AYA’s are the one group of patients with cancer who have not experienced the same gains in survival rates when compared to children or older adults. Cancer occurs more frequently between the ages of 15 and 39 than under the age of 15; the number of newly diagnosed patients between the ages of 15-39 years is 70,000. Getting precise numbers is challenging at times because different analysis have used 15-39, whereas others have used 15-29. The 15-29 year age group represents about two percent of all new cancer diagnoses overall. The types of cancer that occur in the 15-29-year-old age group is unique: e.g., 11% are male genital cancers (with 99% of these being cancer of the testes), 11% are in the endocrine system, 20% are lymphomas, 9% are female genital system cancers, 6% are central nervous system cancers and 15% are invasive skin cancers (75% of which are melanoma). The frequency of cancer types changes from 15-30 years of age, so the patterns at either end of the spectrum are very different.

Most research has focused on clinical trials for pediatric patients under the age of 21. More than 90% of all cancer patients under the age of 15 years are treated at institutions that participate in National Cancer Institute (NCI) sponsored clinical trials. The majority of patients under 15, approximately 55-65%, are enrolled in clinical trials with controlled protocols, which ensure systematic evaluations of the outcomes of treatment approaches. In contrast among adolescents 15-19 years of age, only 20%-35% of cancer patients are seen at such institutions.

Multiple studies assessing adult versus pediatric protocols for acute lymphoblastic leukemia (ALL) have shown that AYA patients have a higher mortality rate when treated on adult protocols compared to those treated on pediatric protocols. Pediatric protocols tend to treat patients with very intensive treatment regimens and in the hospital setting, which may be a factor in having a positive prognosis.

While cancer survival has improved by 1.5% per year for children younger than 15 and adults older than 50 years of age the cancer survival rate for the 15 to 24-year-old group has improved by less than 3% per year. Cancer survival has not improved at all in the 25 to 34-year-old group. These numbers clearly indicate that AYAs need better organized and research-driven care!

There may be some biases that make it more difficult for young adults to be treated on pediatric clinical trials. These biases may be with the providers. The age policy has been to treat individuals over the age of 18 in a community setting rather than in a setting geared toward open pediatric clinical trials. Eighty percent of young adults are treated in a community setting. Many of the cooperative group trials have age limitations that stopped at age 21 although this is now changing moving that age limit to 39. Economic factors may play a role both in terms of ability to pay and ability to be hospitalized because of the young adult’s need to work. There are also insurance-based factors that can dictate the site of care as well. In California there are options for children services that help to cover the costs of the care for the child under 21. Finally, patient preferences must be factored into this as well. The limited data on AYA clinical, health services issues and biological differences is a major problem. We do not know enough about age-specific cancers; the difference in the behavior (aggressiveness) of the cancer in AYAs as well as differences in ability to tolerate treatment. Even when eligible for pediatric clinical trials, AYAs are often treated by an adult oncologist in the community setting who may not have access to enrollment onto these trials.

There is an ongoing debate about who is the best provider of care for the AYA population. In some situations, the site of the cancer may help to define whether they are treated in an adult environment or a pediatric one. For example, adult oncologists are accustomed to dealing with breast and colon cancers, and thus specialists, in these areas may see mostly adults whereas pediatric oncologist may not have the expertise to treat these diseases even when they occur in pediatric patients. There are some diseases that cross over the pediatric and adult practices and these include ALL and the lymphomas. Recent research suggests that treatment outcomes of AYAs with all types of cancer are superior when treated on a pediatric versus an adult treatment protocol. AYAs aged 16-20 years of age (treated between 1988 and 2001) who were on a pediatric clinical trial (n=197) had an overall survival of 67% while those on the adult clinical trials (N=124) had an overall survival of 46%.

Clinical Trials

The work suggests that a new treatment might be better than the standard treatment, doctors will carry out studies to compare the new treatment with the best available standard ones. This is called a randomized controlled clinical trial and is the only reliable way of testing a new treatment. Often several hospitals around the country take part in these trials. They use the same drugs and procedures and document the outcomes and analyze the data together. They do this so that they can accrue a large enough sample of patients to help inform them if there is a difference and to obtain the results more quickly by working together among multiple trial sites. The value of a clinical trial is that it often has the newest drugs and/or newest treatment strategy. It is important to know that having a physician suggest a clinical trial does not necessarily mean that it is a last-resort treatment option for the patient. It might be just the opposite; it might be the next best treatment option. It simply means that the physician thinks the patient and/or society potentially may benefit from the treatment being studied.

Before any trial is allowed to take place, an ethics committee must review the study protocol and approve it. They make certain that rules are followed and that protective measures are in place for patients, including making certain that the trial will accrue enough patients to meet its goals and assess the necessary information. Your doctor must have the patient’s informed consent before starting someone on a clinical trial. This means that the patient understands what the trial is about and why it is being proposed as a treatment option. A patient is supposed to know exactly what is involved and what is expected from them. Even after agreeing to take part in a trial, patients can still withdraw at any stage if they change their minds. This is always true and is always stated in the written consent form. Whether a patient decides to participate in a trial or not, the decision should not affect a doctor’s attitude toward caring for the patient.

In a randomized controlled clinical trial, some patients will receive the best standard treatment while others will receive the new treatment, which may or may not prove to be better than the standard treatment. In order to make certain that the treatments can be compared accurately, the type of treatment a patient receives is decided at random, typically by a computer and not by the doctor treating the patient. This is because it has been shown that if a doctor chooses the treatment, or offers a choice to the patient, he or she may unintentionally bias the result of the trial. A treatment is better either because it is more effective against the disease or because it is just as effective
and has fewer unpleasant side effects. Some people wonder if they will get an inactive treatment such as a sugar pill. This does not happen when there is already a standard treatment available. Researchers want to compare the new treatment to what exists.

Clinical trials are conducted in four phases. In order for a new treatment to exist, it must first be studied in the laboratory to determine its safety and efficacy. This is followed by Phase I trials, which involve patients with cancer who have failed other treatments. The new treatment is given in different dosages. Because Phase I trials may carry significant risk, only a small group of patients participate, and only those who likely would not benefit from other treatments.

Phase II clinical trials help researchers determine the safety and effectiveness of a treatment in patients with specific types of cancer. In other words, researchers are looking to answer this question: Does the new treatment have an anticancer effect?

Phase III involves large numbers of participants and helps researchers decide if a new treatment is as effective as, better than, or inferior to the best available standard treatment. Phase III clinical trials compare the results of patients taking a new treatment with the results of people taking the best available standard treatment.

Phase IV trials involve thousands of people in the study of potential side effects not apparent in Phase III. Phase IV clinical trials are conducted after a treatment has been approved by the Food and Drug Administration (FDA) and is being marketed.

Historically, 90% of children younger than 15 years of age with cancer are managed at institutions that participate in NCRI-sponsored pediatric trials. Only 21% of adolescents 15–19 years of age participate in clinical trials. Estimates for 20–29 year olds is far lower. Presumably, this deprives AYA’s of access to contemporary treatment approaches and clinical expertise that could improve outcomes. Increasing enrollment of AYAs on clinical trials has become critically important as a strategy for improving survival.

Barriers for AYA’s

Getting an accurate diagnosis as an AYA can often be a challenge. Cancer is not common in the AYA age group, and they often go to the doctor multiple times before the diagnosis is made. AYA’s have the highest national rate of being uninsured among all ages less than 65, thus lack of medical insurance can complicate or delay diagnosis. AYA’s may no longer be on a parent’s insurance policy, or they may not have obtained a job that offers insurance. Getting treatment when uninsured is difficult, and a patient may end up in the ER when a crisis occurs; thus, making it the location for diagnosis. In addition, AYA’s have the lowest rates of primary care use of any age group. They are often thought of as healthy, and this assumption can also create delays in seeking medical attention. Decision-making processes can be complicated, depending on the age of the AYA, the AYA’s decision or the patient’s? How much input should each have? There are other important issues that make treatment of AYA’s more complicated. Trying to manage a complicated treatment schedule and maintain a balance in work, or school can be barriers that need to be addressed. It often places a great deal of hardship, educational and financial, on AYA’s. Further there are interpersonal issues such as relationships with parents, significant others, peers, and the absence of peer support. Further

AYA’s have reproductive prescription concerns. There are important issues that AYA’s need to keep in mind. First, AYA’s who are returning to a doctor several times for the same symptoms, should push for additional testing to be done. When a diagnosis is made, review the diagnosis with the doctor or team of doctors. Ask about and review options for treatments, clinical trials, and resources for support that can be used through the cancer journey. Ask about whom to turn to when symptoms arise and what is the plan if the treating doctor is not near the AYA when something changes. Identify risks for both acute and late effects and determine what is being done to minimize these risks.

Cancer Survivorship

The definition of a survivor by the National Cancer Institute (NCI): “An individual is considered a survivor from the time of diagnosis, through the balance of his or her life. Family members, friends, and caregivers are also impacted by the survivorship experience and therefore included in this definition.”

The number of survivors in the United States from 1971 to 2002 has been growing steadily from less than four million to more than 10 million, with about 12 million believed to exist now.

As more patients have been cured from cancer, physical and psychological consequences of treatment have become more widely recognized. The long-term advantage of this is that they have begun to learn some lessons about the costs of the cure. One of those lessons has been about the late effects of cancer treatment. Late effects are defined as changes that occur 5 or more years after treatment. These effects may be physical, psychological, or emotional; that is, they may be different for different types of cancer and should be discussed.

It has been recommended that all survivors have a survivorship care plan – all at a time when young adults most often are at a crossroads in their lives. Cancer is not common in the AYA age group. Some examples that have been identified include breast cancer. Some have been referred to as “the forgotten demographic,” have become a focus of clinical attention and research. In addition to the medical aspects of this disparity, already outlined here, there are myriad psychosocial factors that also have an impact.

Psycosocial Considerations

This section addresses the unique psychosocial considerations for AYA’s during treatment and through survivorship. Quotes from real patients are included throughout.

Focus on Adolescents and Young Adults: As we mentioned at the beginning of the article, both pediatric and older age groups have seen cancer survival growth. However, AYA’s may not find themselves worrying about the same for decades. Once it was understood that such large a population group lagged behind others in survival improvement, researchers began examining why this disparity exists. In recent years, adolescents and young adults with cancer increasingly referred to as “the forgotten demographic,” have become a focus of clinical attention and research. In addition to the medical aspects of this disparity, already outlined here, there are myriad psychosocial factors that also have an impact.

Health Insurance and Finances: AYA’s are a unique population because of their developmental phase of life. Many of them are growing into their adulthood and wanting to establish their autonomy. They often lack financial resources and may have difficulties with access to health insurance. Even those who have health insurance coverage often find themselves underinsured by state or university coverage or capped by their medical plan. Treatment-related costs may be insurmountable or exclusions related to cancer coverage. Most insurance plans have age limits barring adult children from being insured through their parents’ plans at age 26. (Recent changes in health care policy are expected to bring about improvement in this area.) The Department of Health and Human Services estimates that these changes will affect 2.5 million young people, most of whom are uninsured.

• “Aging out” of insurance coverage: “So here I am, six cycles of treatment down, six cycles to go, and how am I supposed to celebrate my 26th birthday when I mean I am going to get kicked off my mom’s insurance halfway through chemo?” Abby, 25, lymphoma survivor.

Delaying Medical Attention and Low Adherence to Treatment: Research indicates that AYA’s have the lowest use of primary care of any age group and that they frequently delay seeking medical attention. When they do seek medical attention, their providers may mistakenly attribute their health worries to such causes as accidents or injuries. Cancer is often overlooked or underinvestigated when someone in their mid-20s goes to the doctor for fatigue. Factors that just assume too much work or partying, not cancer! AYA’s typically lack experience in medical settings and also likely lack experience in self-advocacy when that becomes necessary. These factors often lead to

Survivorship Center of Excellence, will do this for survivors and suggest additional care that may be needed to help to ameliorate late effects. FitzHugh Mullan, MD was diagnosed with cancer, and began the survivorship movement and he wrote:

“Survivorship should be studied as a phenomenon in itself, rather than a byproduct or afterthought of basic research on cancer treatment. As a concept, survivorship has biomedical and psychosocial components. On the biomedical side, secondary tumors, the long-term effects of treatment, reproductive health, and long-term health maintenance warrant systematic investigation. On the psychosocial side, insurance disparities, barriers to appointment, and end of life youth about cancer need to be explored….This strategy promises to produce important improvements not only to the quantity of survivors but in the quality of survivorship in the future.”
diagnosis at a later, harder-to-treat stage. Once diag-
nosed AYA's often have low adherence to treatments and can be lost to follow-up when they make major transitions in their lives, move to new cities or experience other life events. College or career is too often a higher priority than their health needs.

Failing Behind: For most people, becoming an adult involves crucial milestones related to identity forma-
tion, developing intimate relationships, and starting or raising a family. AYA's often feel "off track" with their life plans; they feel different from their peers, left behind, outpaced or forgotten. Goal setting is fre-
quently disrupted, and the things that young people have hoped for are delayed or abandoned. Some have discussed feeling "kidnapped" or losing their sense of self in the process of treatment. Education require-
ments for high school, college or graduate school may be delayed due to rigorous treatment protocols or as a result of related side effects. Jobs and careers, some-
times not yet well established and therefore, lacking such benefits as flexible schedules or significant time off, may be compromised or lost altogether. There are resources available to assist working people to sustain their employment or return to the workforce.

Family: Most, if not all, young adults acknowledge that when they were diagnosed with and treated for cancer, their entire family was affected. Most often the role of a family member, such as a parent or sibling, was crucial. Young adult children are often brought back into their families of origin and returned to situations they had left or outgrown. Parents are required to provide essential instrumental help such as providing housing or transportation, fi-
nancial assistance and emotional support — all at a time when young adults most often are individuating from their parents. Decision-making by young adults can draw parents back into their day-
to-day lives and usually requires parental participation in treatment planning. A third-waves phenomenon of independence, Siblings, older or younger, may be called upon to assist or support in new ways. AYA's and their families experience difficulty in maintaining appropriate, healthy relationships when the indepen-
dence of early adulthood is challenged and young adults find themselves relying again, sometimes very heavily, upon family. It is important to find ways to communicate about these issues, to come to a com-
mon understanding of decisions and the values that inform them. Discussion of these issues is necessary to address the needs of everyone in the family system.

• Autonomy: "I went from being stoked about my new job as a personal trainer, hanging out with my girlfriend, and finally feeling like I had my own life, to living in my parents' house again, asking them for money and for rides to the doctor, and totally missing out on the fun my friends were having. I felt like a kid again, and not in a good way." Nick, 28, sarcoma

• Perspective: "It really gives you a different perspective on life than most of your peers have. It sounds cliché, but it gave me a lot of time to reflect on my life and what I want to do with it. You brus-
<non-ascii-byte>CC come so much more aware of what you’re capable of and how strong you are. It opened my eyes to so much more in the world. It also made me a lot closer to my family." Forrest, 21, leukemia

Sexuality and Body Image: At a time when dat-
ing and sexuality are central to development and self-
understanding, cancer diagnosis and treatments have a profound impact on AYA's. Positive body image is challenged as a result of hair loss, new scars and other bodily changes; weight gain or loss, fatigue and other side effects. Developing a healthy sexuality and fulfill-
ing sexual expression can be enhanced through coun-
seling from qualified mental health professionals and by various community resources. Many young people experience a rapid advancement into a sense of adult-
hood, which requires learning new ways to talk about themselves safely and with maturity. Disclosure of a cancer diagnosis can be very difficult and requires careful consideration, planning, and support. Disclo-
sure often brings with it fear of rejection and worry about loneliness and isolation. Issues of sex and sexu-
ality may be uncomfortable or challenging for adoles-
cents, young adults, their parents, and their providers to address directly. Still, addressing them is essential, respectful, validating and supportive for AYA's.

• Looks aren't everything: "My looks were kind of taken away, too. I was so self-conscious about how I looked that I didn't even try. But that also made me realize that looks aren't everything, and everyone is beautiful in their own way. God, I sound so cheesy." Forrest, 21, leukemia

• Dating game: "I ended up with these scars which no one will ever see until I take my shirt off. It really throws a wrench in the dating game. When do you tell him you've had cancer? What do you say about the scar? What do you say about being irradiated? What can you say that he can jump into a relationship with you? Will he run for the hills no matter what?" Karyn, 35, breast cancer

Fertility: Fertility and childbearing are essential compo-
ents of the lives of many young adults. More attention has been paid in recent years to issues of fertility and cryopreservation for people with serious illnesses. Yet sometimes these needs are overlooked for younger peo-
ple, those who are single, and those who are required to start a treatment quickly. Then when fertility is con-
sidered, financial constraints, time limitations, access to technology and resources and advance planning make executing a young person's wishes difficult. AYA's may also face delays in bearing children as a consequence of adjuvant and maintenance treatments and the real and significant uncertainties about sustained remission and risk of recurrence. Deciding when or if to start a family after cancer treatment can be a difficult process.

Importance of peer support: Adolescence and young adulthood is a time when deepening friend-
ships and intimate relationships are imperative for healthy growth and development. AYA's in cancer treatment are often isolated from friends who have returned to school and risk becoming isolated from peers who are a core means of support. Time commitments for ap-
pointments and the need to travel for treatments can means friends are not readily available. Finding ways to reduce isolation, remain connected, and build social supports is crucial to healthy coping.

Use of Technology and Social Media: Through technology, many AYA's find connectedness; support, information and distractions from the boredom that often accompanies treatment. We encourage young people to maximize the benefits of technology while also mindful of some of the pitfalls. It may take extra time, effort, and energy to keep up. Frequently fear of vulnerability/exposure accompanies social media us-
age. With thoughtful consideration, technology can provide significant support and access to resources not otherwise accessible.

• Peer support: "I got diagnosed right before sopho-
more year, so all my friends were headed back to school and I had to come here for treatments. Luckily I found an online chat group of other kids going through treatment, and I used Facebook to keep in touch with everyone. I think that's two things, as much as chemo, saved my life." Elena, 20, acute lymphoblastic leukemia

Under-addressed Psychosocial Considerations Pain and Palliative Care: Pain management educa-
tion and access to palliative care are often overlooked in AYA cancer care. Assumptions about how young people can handle pain or worries about substance abuse or addiction limit conversations about these very important aspects of cancer care.

End of Life Care: Planning and decision making around end of life care are difficult topics to face at any age, but particularly for younger people. Patients, fami-
lies, and providers are collaborating to battle cancer, and discussions about these issues may be postponed or neglected. Professional guidance can be crucial for facilitating difficult conversations and planning for quality of life for young people and their families.

Cultural/Language Considerations: Most research in the field of young adult cancer is done with white, well-educated, middle to upper-middle-class English-speaking participants. This has led to significant cul-
tural and linguistic barriers to providing psychosocial support. There is growing appreciation for diverse cul-
tural backgrounds and values and the importance in providing culturally competent psychosocial care, yet significant work toward reducing socioeconomic, cul-
tural, and linguistic barriers remains.

• Cultural impact: "My parents are from Japan. They raised me as a Buddhist, and I really try not to externalize suffering. I wanted so badly to join a support group but I worried that they would see me as weak. I eventually met a “cancer friend” and told them I was going because she asked me to go. It’s the best thing I have done for myself." Sumiko, 35, early stage colon cancer

Lesbian, Gay, Bisexual and Transgender Popu-
lations: At this time in our culture, young Americans are finding more freedom and flexibility as they come to understand their sexuality and gender identities and share more openly. Even so, tremendous fear, risk, and difficulty remain for many who are in the process of coming out or identify as gay, lesbian, bisexual or trans-
gender. Dealing with these issues while coping with a cancer diagnosis and its treatments can be very com-
plicated. Having opportunities to connect with commu-
nity resources and safe places for support is essential.

• Coming out: "If I wanted my boyfriend to be able to visit in the hospital that meant I had to tell my parents that I’m gay. I am already asking too much of them as it is to get me through this cancer. There’s no way I could lay that one on them now. But I sure miss him." Miguel, 23, lymphoma, post stem cell transplanted

Growth through the Cancer Experience: In addi-
tion to challenges addressed above, going through a cancer experience can be a time of tremendous growth. Research indicates that AYA’s who manage their can-
cer experience with moderate or high levels of success also find feelings of self-efficacy and mastery. These are key to future successes and to integrating the cancer into their lives as survivors. During this seeking ques-
tioning phase of life, many find spirituality important in solidifying their beliefs and facing uncertainty and major doubts. We encourage AYA’s to seek out pastoral counselors and clergy to support them in addressing questions of fairness, meaning in life and relationship with spirituality and faith communities.

• Spiritual growth: "Man, I have been to hell and back. I questioned God, then I ran at God, then I decided there was no God. There was so much loneliness and isolation. But now that I have had a chance to process this whole thing, to think about what it all means to me and my family, to really look at what I value about being alive, I feel like

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Simms/Mann – UCLA Center for Integrative Oncology News, Fall 2013 5
PET/CT CANCER IMAGING: CANCERS EAT A LOT OF SUGAR

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In 1971, President Nixon signed the National Cancer Act, a United States federal law aimed at strengthening the National Cancer Institute to more effectively carry out the national effort against cancer. Along with Dr. Alva Lettow, leader of the American Cancer Society, the President of the United States declared “War on Cancer.” When President Nixon left office, cancer was still a major threat to life. 42 years later, we are still at war with cancer.

Costs and Cancer
Cancer care costs exceed $100 billion; overall health care costs are approximately $2 trillion per year. The United States spends approximately 15.2% of the GDP on health care, and this is expected to rise. The percentage of private expenditures toward health care has been decreasing, while the percentage of public expenditures has continued to rise. The incidence of the most common cancers has been rising since 1975; however, the mortality rates have been decreasing. When Medicare cost data for cancer were evaluated, the non-imaging cancer expenditures accounted for approximately 95.4% of the expenses while imaging only accounts for 4.6% of total costs. When further divided, 1% of costs are accounted for by PET imaging and 3.6% are attributed to other imaging techniques. Medicare reimburses PET/CT at $1250 per scan.

Imaging Tests in Cancer
There are three key imaging modalities: MRI, CT, and PET.

Magnetic Resonance Imaging (MRI) creates a powerful magnetic field through which images are created by turning this field on and off. It is best for imaging brain, bone marow, soft tissues such as muscles, liver, and pancreas, and is used for a variety of cancers. It is a precise imaging technique and is exquisitely accurate. The whole body can be done in approximately 25 minutes. An MRI scanner is very powerful. Because of the intense magnetic field, it is not safe to have any metals in the room with an MRI scanner. Metallic prostheses are usually safe. MRI scanners are shaped like tubes or a tunnel; because of this, some patients experience claustrophobia and may need an anti-anxiety medication with their MRI scans. There is also noise associated with these scans, which can sometimes be bothersome to patients, but earplugs will make a difference.

Computer Assisted Tomography (CAT or CT) scan can see the whole body in 1-2 seconds. It uses x-rays to produce images of the body. Radiation doses are higher than from one x-ray but many x-rays are taken to form a complete picture. CT scans are good at showing anatomical structures.

There has been much discussion about the exposure that an individual receives from these types of scans. Many patients become worried about this because they may not have a perspective that helps them see the risks and benefits in an understandable way. Overall, CT scans are valuable and provide relatively low doses of radiation without significant consequences. A Gray (Gy) is a method of quantifying exposure/absorption of radiation. In general, most people are exposed to 2.4 mGy (milliGray) per year from the background radiation in the environment. A CT scan can be 10-20 mGy, which is 10-20 one thousandth of a Gy. Radiation therapy on the other hand, uses 45-60 Gy, which is thousands of times higher than the radiation used in one CT scan. There has been ongoing research into the question of whether CT imaging is dangerous. There have been multiple studies published recently, and the conclusion is, “Predictions of hypothetical cancer incidence and deaths in patient populations exposed to such low doses [in imaging] are highly speculative and should be discouraged.” However, despite the scientific evidence, information abounds on the Internet that may lead people to be fearful of imaging. It is not uncommon to hear people use the phrase it is a “one in a million chance.” To provide another perspective, the table below provides a listing of some activities that increase the annual probability of death by “one in a million.” This was published in Imaging Physics in 2011.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Cause of Death</th>
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<tbody>
<tr>
<td>1.2 mrem (1/100 Sv)</td>
<td>Cancer</td>
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<tr>
<td>3 Days</td>
<td>Living in the US</td>
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<tr>
<td>1 Day</td>
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<td>0.5 L</td>
<td>Cigarette</td>
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<td>10 spoons</td>
<td>Peanut butter</td>
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<td>1 gallon</td>
<td>Miami Drinking water</td>
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<td>6 min</td>
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<td>50 Miles</td>
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<td>5 Miles</td>
<td>Motorcycle</td>
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<tr>
<td>1 week</td>
<td>Visit to Denver</td>
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<tr>
<td>150 years</td>
<td>Living 20 miles from a reactor</td>
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Positron emission tomography (PET) is a scanning technique that tracks the uptake of sugar throughout healthy and abnormal tissues of the entire body. The PET scan is a method that enables us to see function rather than anatomy. PET scans identify areas in the body that are absorbing sugar. As a result, the brain and heart show up on PET scans because these are highly active tissues in the body that absorb sugar as fuel. To determine which tissues are absorbing the most amounts of sugar, prior to your scan your medical health practitioner needs to inject into a vein a small amount of sugar that has a small amount of radioactivity attached to it. The radioactive tracer is called FDG, which stands for 2-[18F] fluoro-2-deoxy-d-glucose. After the sugar has traveled through your body and been absorbed, PET identifies those areas that have high uptake of sugar; other than those already known to be high utilizers of sugar, e.g., the brain, these areas can indicate the presence of cancer.

The high utilization of sugar in cancer is based on an important discovery made in 1921 by Otto Warburg when he studied the metabolism of cancerous cells. He found that the respiration of oxygen in normal body cells is replaced in cancerous cells by a fermentation of sugar. Normal body cells meet their energy needs by respiration of oxygen, whereas cancer cells meet their energy needs in large part by fermentation. From the standpoint of the physics and chemistry of life, this difference between normal and cancer cells is hugely significant. Oxygen gas is the source of energy in plants and animals; in cancer cells that process is replaced by an energy yielding reaction of the lowest living forms, namely the fermentation of glucose. In the 1970s the one cancer cell can become 32,768 thousand cells. A one centimeter tumor contains 10 billion cancer cells. This rapid cell division requires a large amount of fuel, and that fuel is the sugar in our body. However, don’t suddenly run out and throw out all your food containing sugar or stop eating fruit. Keep reading because I will be specifically addressing this topic and your concern further along!

During the 1980s and 1990s the quality of the PET scans improved and scans became more useful and specific. FDG, the sugar-based isotope, decays quickly therefore linear accelerators are needed on site to produce FDG. Since the 1980s there has been a huge increase in the number of centers that use PET devices. One of the great advances of imaging technology was the ability to integrate CT and PET scanners into one machine and to superimpose images one upon the other. CT scans show anatomical structures but are not as effective at determining attributes of the structures. The PET scan indicates whether there is strong uptake of sugar and is, thus, useful in diagnosing the presence of most cancers. The PET/CT scanner produces an image of the anatomy fused with the functional images of the use of sugar by cells.

PET/CT imaging helps to determine where a primary tumor is located. For example, it can help to determine whether cancer can be removed by surgery or whether the lesions are outside the scope of a surgical intervention. It is also useful in determining if cancer has recurred, making PET/CT imaging highly significant in making treatment decisions. It has become even more important as a tool in evaluating whether a treatment protocol is working. As a result, patients can stop in...
effective treatments more quickly and move to some-thing more effective for their cancer. This is a critical decision for patients because it helps avoid unnec-es-sary exposure to toxicities of ineffective treatments, it saves money by preventing unnecessary, often highly expensive, treatments, and most of all, allows your on-cologist to switch you to a more effective treatment in a timely manner.

The National Oncology PET registry (NOPR) is collabora-tion between Medicare and a group of researchers. This collaborative effort helped to evaluate impact of PET/CT on the management of cancer patients. Multiple stud-ies have been published between 2007 through 2011 showing that cancer staging and restaging has been greatly affected by PET in most forms of cancer. Be-cause of this research, PET/CT is now covered by insur-ances for most forms of cancer. Primary prostate cancer is one of the few not covered but we are now allowed to monitor with PET therapeutic responses of prostate cancer that have spread. There are some exceptions for breast and melanoma. Several other studies have shown that the inclusion of PET in the management of cancer patients can result in improved survival. The first set of images show a normal CT scan, a normal PET scan and a normal PET/CT combined. The second set of images, an abnormal CT scan, an abnormal PET and the fused PET/CT, shows that the abnormal areas of anatomy on the lung and adrenal gland are functioning abnormally because of the high uptake of the sugar.

Preparation for PET/CT Scan

It is important that you prepare appropriately for a PET/ CT scan. Patients often receive intravenous contrast in-jection for the CT portion of the PET/CT scan; therefore, prior to getting a PET/CT scan, blood creatinine levels must be monitored via a blood test prior to the proce-dure to assess the function of your kidneys.

Patients are asked to fast for 4-6 hours prior to the scan but are allowed to drink fluids. You should not exercise on the day of or the day before a PET scan because muscles use a lot of sugar and exercising could cause a more diffuse uptake of the radioactive tracer into the muscle instead of the potential tumor sites, creating images that are more difficult to interpret. Regular medications should be taken on scan day including medications for controlling diabetes. It is important to stay warm, during the period that the tracer is in the body, because there is something called "brown fat" that is characteristic in infants, young adults and some older adults. When cold, this "brown fat" will take up sugar, leading to a scan that is difficult to read. Do not worry if the scanner room is cool. Blankets are usu-ally given, but by the time you are in the scanner, the FDG has already distributed throughout the body. Wear warm clothing when you come to the clinic for imaging to keep your body warm and comfortable. This will also prevent the brown fat from using a lot of sugar.

The Actual Scan Procedure

Patients who have never had a PET/CT scan wonder what the steps are. Overall, it should take about 30 minutes for the actual scan. But since the FDG is injected 1 hour before we start imaging you should receive a total of close to 2 hours for your visit. Sometimes, we will run a little late because another patient needed more time for imaging.

The basic steps from arrival at the clinic are:

- You will be positioned in a comfortable recliner for about one hour and should be kept warm. If you are not warm, ask for blankets.
- You are taken to the scanner (next door)
- You are placed on the scanner bed (the room is fairly cold)
- The contrast material for the CT portion will be injected
- The CT images are taken (less than one minute)
- The PET images are taken (around 25 minutes)

The report will be available within 24 hours although most of the time it will be available for your treating physician within a few hours.

Concerns and Questions after the Scan

There are very few side effects from these scans. A PET scan may create pain at the site of the IV injection, and very rarely, an infection. About 5% of patients have claustrophobia in the scanner. For patients who are anxious about the scans, benzodiazepines such as valium are very effective anti-anxiety medications that can be taken beforehand. Discuss this with your doctor before the scan. If you do take valium you will need to be driven to and from the clinic by a relative or a friend. The radiation exposure from the scan is low and is not dangerous if the scans are used as currently indicated. For the CT component, the IV contrast can cause aller-gic responses, and patients with kidney problems may need to be careful about the contrast. Oral contrast can cause abdominal discomfort in some patients. After the scan you are not radioactive, and there is no danger to you or to others around you. You can be in contact with children, pregnant women or anyone else. If you drink fluids it will wash out the radioactive sugar tracer more quickly. You are allowed to eat whatever you want after the scan is over.

The Internet, CAM and Myths about Sugar and Cancer

It must be noted that while Warburg’s finding about the use of sugar for cancers was an important scien-tific finding. However, postings on the Internet have created misleading and inaccurate conclusions about the relationship between cancer and sug-ar intake. Warburg’s findings did not state that eating sugar leads to cancer. It is important to understand more about this in order to avoid “diets and cures” that are misrepresented on the Internet.

The human body relies on glucose. Certain organs, es-pecially the brain and the heart, two of our most vital and hard-working body parts, consume extremely high amounts of glucose because they require high amounts of energy. For example, if the body does not have enough glucose, it converts other things, such as fatty acids and proteins into glucose. It is true, however, that in comparison to most cells, cancer does have a sweet tooth. Cancer cells consume about 20-30 times more sugar than normal cells because cancers are rapidly di-viding cells; in order to divide rapidly, they need energy. Glucose (sugar) is a rapid energy source, so while can-cer cells do eat proteins and fatty acids as well, they rely on glucose. Though “technically correct,” the con-cept that sugar feeds cancer is also misleading because sugar feeds every cell in our bodies. Even if you could cut every bit of sugar out of your diet, your body would make sugar from other sources. All cells—healthy and can-cerous—need sugar to grow. It helps to remem-ber that there is nothing particular about sugar that “feeds” cancer cells any more than sugar feeds all of the cells in our bodies. The body makes its own sugar. It is impossible to starve a cancer by creating a diet that is absent of sugar.
Women with breast cancer can face many difficulties when trying to get the best care breast. The “system” can oftentimes be difficult to navigate, as there are many different individuals who must participate in the complexities of diagnosing and developing an individual treatment plan. There can be a lack of consistency in the way that the diagnosis and care is approached, both within institutions and outside in the community. Patients can “fall through the cracks” if they don’t have someone who is overseeing their care. There can be communication problems between multiple providers and it can be cumbersome trying to clarify misunderstandings or differences. In order to provide optimal care, breast cancer patients need a team of health care professionals who work together to coordinate, optimize and improve communication and care. Patients need a navigator who ensures effective communication with each patient and her/his care team.

At the UCLA Santa Monica Center for Personalized Breast Care we have developed a team approach that combines a breast surgeon, a radiation oncologist, a medical oncologist, a radiologist, a pathologist, a plastic/reconstructive surgeon, a genetics counselor, and the team of the Simms/Mann -- UCLA Center for Integrative Oncology to provide psychosocial support, spiritual support and integrative medicine. In addition, we have a navigator who is able to direct the patient’s appointments and see to it that patients are not lost in the system. In our program, patients come to one a day visit, usually on a Wednesday morning, see everyone that they need as part of the team and walk away with one plan of care. Currently the Center is located at 1223 16th Street, Santa Monica; the phone number is (424) 259-8791.

This program provides you with access to all the specializations you need as a patient with breast cancer:

Breast Imaging: Breast imaging includes mammography, breast ultrasound, MRI, tomosynthesis (3D mammography) and imaging-guided core needle biopsy.

• Mammography: The current screening guidelines for mammography recommend annual screening mammography beginning at age 40 (American College of Surgeons, the American College of Radiology, and the American College of Obstetrics and Gynecology). There is no longer a recommendation to begin baseline mammogram at age 35. If you are a woman with special circumstances such as radiation exposure to the chest, a mother or sister with pre-menopausal breast cancer or a carrier of BRCA1 or BRCA2 gene mutation, you may need to begin screening mammography at an earlier age. Screening mammography includes two views of each breast: the mediolateral oblique (MLO) view, which is an angled side view of the breast, and the craniocaudal view (CC), which a view from above. If your mammogram shows something abnormal or inconclusive, you will be scheduled for additional views. Many times these additional views clarify that there is no problem. Benign (non-cancerous) findings on mammograms are very common. Some mammogram findings that may indicate an underlying breast cancer include calcifications, especially when they begin to line up along a duct, or a suspicious mass that has tentacles (spicules) that extend into the adjacent breast tissue.

Mammography is proven to be useful for early detection of breast cancer, thus reducing mortality, but it is not a perfect tool. Annual screening mammography decreases mortality by 30-50% and has increased the diagnosis of localized disease. Many factors can affect the likelihood of detecting breast cancer on a mammogram and include positioning, compression, image clarity/sharpness, noise, exposure, and interpretation. The density of the breast tissue is very important. Each woman has a different admixture of breast tissue and breast fat that varies with age, heredity and hormonal status. It is easiest to see breast cancer in a breast that is entirely fatty because breast cancers appear white on the mammogram while fatter breast tissue shows up as a dark background. Thus, the white breast cancer stands out in contrast on the dark (fatty) background. It is much more difficult to see cancer in a breast that is extremely dense because dense breast tissue and breast cancer both show up as white. Radiologists divide breast tissue into four types, 1) almost entirely fat, 2) scattered fibrol glandular densities, 3) heterogeneous and, 4) extremely dense.

• Ultrasounds: Ultrasounds are used to help improve imaging of dense breast tissue. Ultrasound has no ionizing radiation; instead it uses sound waves to “see through” dense breast tissue. Breast ultrasound is the most commonly used tool to further evaluate a woman with an abnormal mammogram or breast lump.

• MRI: Magnetic Resonance Imaging (MRI) is based on the interaction of hydrogen atoms in tissues with strong magnetic fields and radio waves. In a breast MRI, the findings are categorized based on the shape as well as the pattern in which they enhance (light up) or take up gadolinium. Unlike mammography, breast MRI is not affected by the density of the breast tissue. The advantage of an MRI is that it is highly sensitive (typically 90% or more). The disadvantage of MRI is that it is very expensive and has a lower specificity (50-80%), which means that a lot of benign things will show up or be “enhanced.” As a result, MRI can create false positives. It is not a substitute for mammography. It is a powerful tool when used appropriately in conjunction with mammography to screen women at very high-risk for the development of breast cancer, to evaluate the extent of disease in newly diagnosed breast cancer or to search for a known but otherwise hidden breast cancer in a woman with metastatic disease in her axillary lymph nodes.

• 3D Mammography: The newest technology with great promise is digital breast tomosynthesis which

is also known as 3D mammography. The breast is compressed as in mammography while the x-ray tube moves in an arc over the breast. A series of low dose images are acquired at different angles by the x-ray tube. The total dose is similar to a 2D mammogram. The images are reconstructed as 1mm thick slices and viewed by the radiologist, layer by layer. This method improves the visualization of fine detail; it eliminates overlapping structures which sometimes make it hard to read mammograms and increases the ability to “uncover” cancers hidden by dense breast tissue. A recent article on tomosynthesis reports a 27% increase in the detection of all cancers (invasive and in situ combined), a 40% increase in detection of invasive breast cancers and a 15% decrease in callbacks for false positives and further mammograms.

• Image Guided Needle Biopsies: Radiologists also perform many different types of image guided needle biopsies, called core needle biopsies, when something suspicious is found on an imaging exam. Ultrasound or mammography is used to guide a biopsy needle into position for tissue sampling. The tissue is then submitted to the pathologist for interpretation and diagnosis. If a breast cancer is found, then an appropriate treatment plan can be developed prior to surgery.

The Pathologist and Breast Cancer Diagnosis The pathologist analyzes and processes all tissues (biopsies and surgical specimens) in order to make a diagnosis in conjunction with the clinical and radiographic presentation. As custodians of your tissue samples, they preserve and bank the tissue and create slides for viewing. Their job is to evaluate the features of the cells and margin. Radiology sometimes helps the pathologist by marking if enough clean healthy tissue surrounds the tumor. This is used for prognosis and treatment decisions.

The entire process takes a minimum of 24-48 hours. The tissue is then submitted to the pathologist for diagnosis. Their job is to evaluate the features of the cells and

Getting an accurate diagnosis and appropriate treatment depends on the pathologist, proper tissue handling and thorough evaluation.
communicate those features to your oncologist as they are linked to prognosis and response to therapy. The first step is the "gross evaluation," which means identifying the lesion within the tissue and its size, assessing the relationship of the identified area to the margins, assessing lymph nodes, and sampling the lesion for histologic analysis. To identify margins they look at where the tumor is in relation to the edge of normal tissue and how they measure the distance on all sides to determine if enough clean healthy tissue surrounds the tumor, creating what is referred to as "clear" or "clean" margins. Radiology sometimes helps the pathologist by placing a clip in the affected area that was biopsied that the pathologist can use as a marker.

The second step, called histologic processing, is the process of permanently preserving the tissue. The tissue is preserved in a paraffin block. This allows for slicing the tumor and creating slides. This allows histologic assessment to be taken for viewing under the microscope. The entire process takes a minimum of 24-48 hours. This is also critical for accurate biomarker testing which is used for prognosis and treatment decisions.

The pathologist looks at between 10-50 slides under a large microscope. In breast cancer they are looking at the normal cells, pre-cancer cells, early cancer, ductal carcinoma in situ (DCIS) or invasive cancer. The pathologist grades the cells as a method of describing how similar the abnormal cells are in relation to normal cells and how they look regarding their architecture—the nuclei and the amount of cell division that is in process (mitotic activity). They confirm the size of the tumor and evaluate the distance of the tumor from the margins.

They also look for lympho-vascular invasion—whether the tumor cells are in the blood vessels or lymphatic channels in the breast. If lymph nodes are sampled they also look to see if there are any tumor cells in these areas. Pathologic staging requires size of the tumor, the number of tumor cells, the presence or absence of metastatic presence, which comes from clinical and radiographic correlation.

Pathologists must be very thorough in how they approach their decision as their disease and set recommendations for treatment. They examine the ducts to see if they are intact, in which case it could be a diagnosis of DCIS; they also correlate with radiographic information that could lead to a diagnosis of DCIS. They, also, determine if the tumor can be seen to if the cells have migrated outside of the duct structure, in which case the diagnosis is invasive breast cancer. When grading the tumor they assess whether it is well-differentiated (which means that it is still making ducts) or poorly-differentiated (which means that it is no longer making ducts and, thus, looks less like normal tissue). There are special staining procedures that they do for lymph nodes to identify isolated tumor cells in these structures.

Biomarker evaluation looks at the immunohistochemistry of the disease. This process determines if the cells have estrogen or progesterone receptors and whether they are positive for HER2 receptor over-expression through an evaluation called FISH. It also determines the Ki67 score, which reveals the percentage of cells that are in the process of dividing and multiplying. A higher grade reflects more aggressive cancer cells. There are also other more exotic tests that can be done including microarray analysis, direct gene testing by PCR and high-throughput gene and RNA sequencing.

Breast cancer subtypes are determined by gene expression profiling. About 70% of all breast cancers are " luminal A,” which tend to be estrogen receptor positive (ER+) and/or progesterone receptor positive (PR+). About 15% of breast cancers are HER2 positive and they tend to be ER negative (ER-). Approximately 15% of all breast cancers conform to a subtype called "basal-like” which are ER, PR, and HER2 negative; these are referred to as “triple negative.”

There are currently two genomic assays in clinical use for breast cancer. Oncotype DX analyzes activity of 21 genes and it is used to determine the risk of recurrence in early stage ER+PR+ tumors. A recurrence score of 0-100 is assigned; the higher the score, the greater the likelihood of recurrence if no further treatment is done. This can be assessed from tissue that has already been formalin-fixed, the process used by the pathologist when the tumor blocks are made. Mammaprint is an FDA approved test that analyzes 70 genes. It calculates whether someone is at a low or high possibility of recurrence. However, because this analysis you must make a decision before you have your biopsy/surgery because it requires fresh tissue that has not been formalin-fixed. As a result this test is less widely used. It is also more expensive.

Getting an accurate diagnosis and appropriate treatment depends on the pathologist, proper tissue handling and thorough evaluation. These critical steps take time, which can be frustrating for patients who want to know the results immediately. Molecular analysis is an arena that is evolving rapidly. It complements the histopathologic diagnoses which can lead to rational therapeutic decision making or more "personalized" therapy approaches.

Surgical Treatment

The goal for breast cancer surgery is to remove the tumor, minimize disability and maximize the cosmetic or aesthetic outcome. Cutting the tumor out prevents it from growing and spreading and helps to stage and determine your future treatments.

The breast is comprised of lobules, the primary pathology anatomy where breast milk is made, and ducts, the structures that carry breast milk to the nipple. While breast cancer occurs in either of these structures, most breast cancer occurs in the ducts. Surrounding the breast and into the armpit area are many lymph vessels and lymph nodes that make up the body’s lymphatic system, part of the immune system. These vessels and nodes help carry waste, move fluid and help the body fight infection. Breast cancer cells can use this pathway to travel to other areas; therefore, it is important to examine these nodes to determine if any breast cancer cells have been travelled or migrated into them. If the breast cancer is confined to the ducts, as in DCIS, there is no need to examine the lymph nodes; however, if the breast cancer has gone out of the duct then the nodes need to be sampled to determine whether the cancer cells have spread which, in turn, determines the need for further systemic treatment.

There are different surgical approaches for breast cancer. A partial mastectomy or quadrantectomy is a procedure in which a section of the breast is removed where the tumor is located and a small part of normal tissue surrounding is also removed. A simple mastectomy removes the breast. A modified radical mastectomy removes the breast and lymph nodes. A radical mastectomy removes the breast, chest muscle and of all the lymph nodes. Breast cancer surgery can be overwhelming so we are careful to ensure your surgery is personalized. Personalized breast cancer surgery takes into consideration the tumor size and its relation to breast size. If the tumor is larger and the breast is small, a partial mastectomy may not be possible or may lead to adverse cosmetic consequences. The tumor biology is important and so is the general health of the woman with regard to ability to undergo a more extensive surgery. Preference is also important and should always be discussed. Sometimes the surgical decision requires that other factors be involved in the decision-making; for example, reconstruction issues and future treatment may influence the timing of different surgical interventions. Also, if a patient has genetic testing and it reveals mutations, that could lead patients to other decisions, such as prophylactic removal of an unaffected breast.

Breast cancer surgery has evolved a great deal since the 1970s. From the 1980s to 1970 it was believed that the more radical the surgery, the better; the initial surgeries were very disfiguring as they removed the entire breast, the chest wall, muscles and often left the woman not only visually deformed but disabled from the surgery. Over time surgeons developed a modified radical mastectomy that spared the chest wall and removed only the breast and lymph nodes. Later a simple mastectomy evolved. The skin sparing mastectomy removes the breast tissue by removing the breast tissue but leaving the skin intact, like an empty shell. If the tumor is not near the nipple, the nipple sparing mastectomy makes it possible to reattach the nipple.

Breast conserving surgery allows the majority of the breast to be left intact but the clear band of margin of tissue is removed around it. This allows the addition of radiation treatment to hold off the development of local recurrence to the breast.

Lymph node surgery has also evolved. The purpose of this surgery is to remove diseased lymph nodes and to determine the number of lymph nodes involved. An axillary lymph node dissection used to be performed that cleared out the level 1 and level 2 lymph nodes. However, one consequence of this surgery was that women developed lymphedema, a condition in which the body no longer has the capacity to move the lymph fluid from affected territories and about 20-30% of women developed swollen arms because the normal mechanisms were not in place to move and filter the lymph. In addition, there were additional complications to this surgery which included pain, numbness and potential decreased range of motion of the shoulder. In the 1990s lymph node surgery was transformed by researchers who demonstrated that removing a sentinel node (the first lymph nodes that the breast drained into). They did this by injection of a tracer of blue dye or radioactive tracer prior to surgery and then following the dye and/or radioactive tracer with a Geiger counter to find the first node or few nodes that took-up this tracer. By doing that, they could sample just these lymph nodes and eliminate the need for the radical surgery of removing all of the lymph nodes at levels 1 and 2.

Breast Reconstruction

Almost all women who undergo surgery to remove a breast (lumpectomy or mastectomy) are candidates for breast reconstruction. Reconstrutive surgery can be performed at the time of initial breast cancer surgery or at a later point in time.

In a recent survey of women with breast cancer, 70% of them were not informed of their options for breast reconstruction. The goal of breast reconstruction is to restore some of what cancer has taken away. Reconstruction can help restore breast shape, symmetry, and one’s identity.

Breast reconstruction can be performed at the same time as a lumpectomy or mastectomy or it can be performed many months later. The plastic surgeon should always be involved early in the decision-making and treatment planning process because the patient’s choice of treatments may determine how the surgical oncologist does the initial surgery.

For some women, plastic surgery is needed after a lumpectomy. This partial breast reconstruction can be used to change the breast and breast tissue to restore the shape and appearance of the breast.

There are many different reconstructive options available after mastectomy. In general, all methods of re-
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Veronica Chambers
Jorge Cabezas
Sherri Chac
Sharon Henry Clark
David Clark
Dean Cleverdon
Daniel Corbett
Justine Coogan
Evelyn Cohen
Grace Cohen
Kara Mortillaro-Decker
Dennis Drake
Dorothy Dunne
Linda L. Edelman
Evelyn Elbaum
Shadine V. Escovedo
Alan Esfahani
James Fitzpatrick
Maeve Flanagan
Erika Sie Franke
Cathleen Galas
Cynthia Garbutt
Mauro Gardner
Glennary Lic
Mille & Goldberg
Barbara Goldberg
Dorothy Golding
Irene Azulai Gomez
Phyllis L. Gottlieb
Ruth Grabel
Sandro Grossman
Pilar Guzman
Leila Gurelani Hagen
Peter Halle
Vivian Hal
Max Hampton
Anne Harrington
Yooshie Hatcher

Jerry Hawkins
Mark Hettinger
Gloria Hessler
Susan Hirschhorn
Judith Hirshberg
Michele Housley
Catherine Eddy Iwakura
Laure Jacobs
Sueann Janshaghian
Katharine Jones
Antis Kellum
Beryl Koppel
Mrs. J. Kosarik
Selma Krant
Ranomi Krieman
Lisa Kring
Soochin Kuchel
Deborah Lefkowitz
Barbara A. Lefton
Betti Lissman
Shirley Levin
Linda Levy
Paula Light
Wilderness Lightner
Clarke Linnton
Jeffrey Lloyd
Marcia Lloyd
Madhia Lottsten
Stephen Lottenberg
Yvonne Maday-Carroll
Metin & Tulin Manci
Christanne Meck
Brigitte McKeely
Maurella Freedman McKinnon
Waine Smith
Laure Montegomery
Michael Nomimis
Mary Jane Myers
Carolin Notter
Virginia Neuhauser
Linda L. Nicholas
Ronald Nishigama
Colleen O’Callahan
Julie Onoium
Sus O’Roff
Ornette Family Foundation
Paulette Segal Parker
Narishi Pata
Gary Peckstein
Lon Pepperman
Y personnel
Virginia Peiffer
Linda Pelsue
Donna Pollock
Gloria Pondow
Aaron Raif & Danielle Kirshbaum
Irena Rabin
Sandra Ross
Stephanie Rizzi
Carolyn Roderick
Edgar Rodriguez
Gil Schoen
Carlyne Richard Shergian
Michael Shehky
Ediprie Shanzy
Kerry Robin Smallwood
Elizabeth & Greg Smith
Ross Sodik
Michael Sterling
Al Stin
William Strauss
Andrew Swiradoff
Tech Thiem
Jonnea Low Thompson
Robert Kazung Toji
Leone Trubkin
Arleen Trudelma
Wernos Von Der Ohe

Pamela Walker
Robert Weiss
Jacob Winer
Linda Whiting
Ruth Wiggins
Patty Wiper
Rosamond Zarhaim
Roberta Zanzotto
Dona Zimmerman

In Memory of:

CY BEER
Jeffrey Alan Dinen
Arthur B. Burch
Jane D. Brolan
Alma Cameron
Rozanne Cameron
Anne Carey
John and Joanne Carey
Jeanne Marie Cooley
Robert Dasteil
Betty Daytel
Martin Gale
John H. Havens
Max Ganswieg
Jerrie & Sandy Barsha
Karen & Neil Davis
Mary Ann Fenster
Suzanne Zehrle & Leo Fisheberg
Ruth Goldberg
Leonard & Rivera Goldman
Jeffrey & Wendy Goldsmith
Julia & Richard Jarrett
Betty Johrendt
Charles & Helen Kady
Shirley Levy
Sandra & Robert Mansour
D. L. Stanwood & J. M. Mitchell
Sandra & Ilena Morris
Jeffrey & Irene Ross
Dorothy Rush
Rusty & Anne Sanders
Bruce & Cuck Sherman
Edith & Mitchell Winter

CLARA & ZYGMENT GOLDBERG
Seth Conrad
JERRY GRACONIG
Seth Conrad
Dave & Donna Haber
Nancy Netzer

Patsy Howard
Grace Millington
Heather Kang
Bruce Naoum

Bob Keilly
John & Brian Adams
Harry & Philip Anderson
Brian Bennett
Wayne & Sue Burke
Steven & Robin Caplitz
Carmelwe Wages Management
Cory Cornichon Emerson
Wyler
Anne Coscarelli
Vincent Crescenti
Jeffrey Alan Dinen
Cheryl & Jeff Dorko
Robert & Joak Fenton
In Fournier Group Financial, Inc.
Stephen & Nancy Gerhard
Mark Geschwind
Michael & Joleen Hall
Kerry & Linda Housh
Many people find great value in being part of a group led by an experienced professional. Since each person has somewhat different needs, we offer a variety of groups. Some groups are like a class while others provide greater opportunity for self-expression, feed-back and providing and receiving support.

The groups listed below are available without cost to patients and family members. Priority is given to UCLA patients. Enrollment requires an interview with the facilitator. For more information about our groups or to enroll, please call (310) 794-6644.

FOR PATIENTS:
Ethical Wills – Ethical wills are an age old custom for preserving and passing on your values, beliefs, life lessons, hopes for the future, love, and forgiveness to your family and community.

Healing Through Art – A weekly art therapy group to explore the issues faced by individuals with cancer. No art skill required.

Living Beyond Limits – Two weekly support groups, one for only women with recurrent or metastatic disease and one to open to all patients with recurrent or metastatic disease.

Look Good; Feel Better – A 3-hr program for women, co-sponsored with the American Cancer Society. Participants receive complimentary cosmetics and learn skin care, make-up application & the use of wigs and head-coverings.

Looking Ahead – A monthly group for women who have finished treatment and have no evidence of disease.

Women Together – A weekly, ongoing support group for women being treated for early stage breast cancer.

Young Adult – A group for young adults facing the challenges of coping with life and medical issues.

FOR PATIENTS AND THEIR FAMILY MEMBERS

Acupressure – A program that teaches helpful protocols and acupressure techniques for yourself and your loved ones.

Circle of Reflections – An exploration of spiritual journey that cancer creates for each of us. Each month reflects on a different theme.

Iranians Touched by Cancer – A bi-weekly support group held in Farsi for Iranian cancer patients and their family members.

Meditation: Guided Imagery for Inner Healing – A group designed to optimize emotional, physical and spiritual well-being through meditation & guided imagery.

Mindfulness Meditation – A weekly group to enhance well-being in the present moment.

QiGong – A weekly group practicing an ancient Chinese movement for restoring health and prolonging life.

FOR FAMILY MEMBERS & FRIENDS

Bereavement Group for Spouses/Partners – A bi-weekly group for men and women who have lost a spouse/partner to cancer.

Caregiver – An 8-week support held Monday evenings to help caregivers manage the symptoms of stress and learn to care for themselves while caring for another.

Husbands (Partners) of Women with Cancer – An evening group for men who live with women diagnosed with cancer.

INTEGRATIVE ONCOLOGY PROGRAM:
These fee-based programs help you maintain or restore health and wellness, improve quality of life and live as fully as possible.

Individual Integrative Medicine Assessment – Meet one-on-one to formulate a plan to maximize your overall health and wellness, based on an in-depth review of your current lifestyle. Topics covered include nutrition, exercise, herbs & supplements, and alternative medical treatments. Cost is $350.

In honor of:
KAUSER AHMED
Yvonne Bellut
Judith Anne Carden
Julie Elizabeth Crenner
Darcy Adrienne Donberth
Patricia Ganz
Alicia Garty
Yvette Warren Peterson
ANNE COSCARELLI
Ellen Ann Glier
Charlotte & Sheldon Krutzy
Bruce Naidoff
ANNE COSCARELLI
AND HER TEAM
Mark E. Poon
ANNE COSCARELLI
Marilyn Kratz
Lynd Naisbitt & David Pettitt
Roxey Sue Zarem
COSCARELLI/HOWARD
1ST ANNIVERSARY
Roxey Sue Zarem
ELSE DAHL
ELSE B. DAHL
KATHRYN DEプランQUE
Judith Nelson

In honor of:
PATRICIA GANZ
Rosaly Sue Zarem
DR. JOHN GLASPY
Lauren Fujihara Izukai
DR JOHN GLASPY &
DR HELENA CHANG
Darcy Adrienne Donberth
LINDA GORDON
Barry Beckerman
MARY C. CHRISTLY
Mary Goldman
Michael A. Kosin
Susan Jane Strauss
HUSBANDS SUPPORT GROUP
David M. Frank
Adam Nimoy
SHANE KENNINGTON
Gael Klauninger
Lori Ann Keim
Sylvie Catherine
LISA KIRK
Pheylis Ryne Birnbaum
Herman and Joan Latt
Roxey Sue Zarem
SUZANNE LEVANAS
Kathina Beitz
Homick & Socorro Cortes
Melissa Joy Pugsay
STEPHEN LOTTEMBERG
David M. Frank
Steve Novak
Kerry & Jed Silverstrom
TEODORO MARTIN
Margo Martin
THE METH FAMILY
Zoe Bo-Linn
Stroyn Cathcart
Dave Clark
Nathan Davis
Donald Goodisman
Sarah and David Hopkins
Sumant Jaghri
Andy Kaplan
Dane Krichbaum
Ruth Krichefske
Andrew Krilov
Clark Linstone
Patricia McKee
Azmon Raiz
Ed Slawney
Andrew Sperlingoff
Jonathan Weisberg
ANNETTE MICHAELS
Bruce Balisky
MR. & MRS. BOB NEWHART
Cheryl Grand
TOM PIEPER
Ellen Leonard
Melissa Joy Pugsay
DR. JONATHAN SACK
Joan H. Haddow
JULIE SIMMS
Gentle Life Teachings
RONALD & VICTORIA SIMMS
Diane Schultz
VICTORIA MANN SIMMS
Karen Dow Fritts
BRIAN SMITH
Elizabeth Smith
ALEXIS SPEED
Adam Swartz
JULIUS THOMPSON, ESQ.
Nathan Davis
CELESTE TORRENS
Rai Donin
LILLIAN ZEV
Ari Zev

Simms/Mann – UCLA Center for Integrative Oncology News, Fall 2013 11
Cancer is toxic to fertility. Approximately 11% of all cancer diagnoses are made in individuals in their reproductive years. Researchers have identified the specific levels of radiation exposure toxic to the eggs (oocytes) for females and the cells that create sperm for males. Researchers: Researchers have identified the specific levels of radiation exposure toxic to the eggs (oocytes) for females and the cells that create sperm for males. Researchers have identified the specific levels of radiation exposure toxic to the eggs (oocytes) for females and the cells that create sperm for males.
construction involve a multi-step process that includes creating a breast mound, revision of the breast mound and/or adjusting the other breast for symmetry or extraction nipple-areola reconstruction. The two major reconstructive options are to use an expander/implant or to use autologous tissue (using tissue from another area of the woman’s own body) to recreate the breast.

When an expander/implant is used, the first step is to place the expander beneath the pectoralis (chest) wall muscle and skin. The expander is then inflated over the next few weeks to full capacity with saline fluid to help stretch the skin to accommodate the final implant. The second step is to replace the expander with a permanent saline or silicone implant. The third step is to adjust the other breast to match the reconstructed breast or to proceed with nipple-areola reconstruction.

The advantage to the expander/implant technique is that it does not leave any scars on other areas of the body. The disadvantages can include the potential for implant rupture or capsular contracture (in which scar tissue forms around the implant and can cause a change in the shape of the implant or a feeling of tightness and pain. Radiation effects are unpredictable and in some cases can result in good, however there is no guarantee. The goal is to keep the capsular contracture is increased with radiation therapy. Autologous tissue reconstruction uses the woman’s own tissue (from another area of the woman’s own body) to recreate the breast. The most common source of tissue is the abdomen. This surgery is called “DEEP flap” surgery and involves taking the excess skin and fat from the abdomen, just like a tummy tuck, except that the removed tissue is used to create a new breast.

This technique requires microsurgery to connect the blood vessels together and requires a very skilled surgeon with a lot of experience. The second step is to adjust the other breast to match the reconstructed breast. The third step is to proceed with nipple-areola reconstruction.

Systemic Therapy for Breast Cancer

There is a shift going on in how tumors are classified and treated with regard to systemic therapies. Traditionally, tumors were classified by how they look under the microscope and their organ of origin; their treatments involved chemotherapy to kill all rapidly dividing cells. Now, in the future more and more tumors are classified by the molecular problems that cause them to behave like cancer and treated with therapy that is specifically targeted toward the molecular defect in the tumor cells, thus leaving normal cells alone. That being said,
there are still important roles for chemotherapy, often in combination with these new targeted treatments.

**Hormone Sensitive Tumors:** Sixty to 75% of breast cancers are hormone sensitive (ER+/PR+). Tamoxifen is a targeted systemic treatment that blocks the estrogen receptor and has been around since the 1980s. It is given after primary treatment to prevent the chance of recurrence. The data for tamoxifen are strong; in a meta-analysis of 10,000 patients comparing a placebo compound to tamoxifen for five years, the patients who received tamoxifen did better in both rates of recurrence and mortality. This finding held true even after they had taken the drug for 10 years or more. In a recently published study (2012) referred to as the ATLAS study, there was a benefit to taking 10 years of tamoxifen in younger women with a 25% reduction in breast cancer recurrence and a 29% reduction of mortality. This study does not take into consideration the introduction of AIs.

Another targeted systemic treatment are Aroma-
tase inhibitors (AIs), which were developed to interfere with the peripheral production of estradiol in women who are post-menopausal with breast cancer and who have hormone sensitive tumors. Researchers began testing AIs in the 1990s. There are three drugs that fall into this classification: anastrozole (Arimidex), letrozole (Femara) and exemestane (Aromasin). They are only appropriate for post-menopausal women with ER+ and/or PR+. Multiple randomized phase III clinical trials have been performed and all show a 2-6% reduc-
tion in the risk of breast cancer recurrence com-
pared to tamoxifen. The current standard is 5 years of therapy and they are awaiting results comparing 10 years.

Hormones are a driving force of hormone receptor positive breast cancer. Hormonally-targeted therapy saves lives and helps prevent metastases. There may be some new targeted approaches for early breast cancer that is hormonally sensitive as there are new targets being studied in patients with metastatic disease. Oftentimes the research studies are done in resistant disease and then tried in early disease. One of these targeted drugs, everolimus, has been tested in cell lines and in phase I/II stud-
ies and shown to be promising in ER+ disease. Everolimus blocks the mTOR pathway that hor-
mone sensitive breast cancers sometimes use when they become resistant to anti-estrogen therapy. A phase III study (“BOLERO-2”) was recently pub-
lished in which 724 patients with post-menopausal ER+, HER2 negative metastatic breast cancer were randomly assigned to receive an aromasate inhibi-
tor (exemestane) alone or with everolimus. Patients who received everolimus lived significantly longer without their disease getting worse than patients who did not receive everolimus. It is now being tested in early stage breast cancer. In addition, CDK4/6 inhibitors appear to affect the growth of luminal cell lines. In addition PI3K inhibitors and heterodimer formation inhibitors are also under inves-
tigation.

**HER-2:** Approximately 20% of breast cancers overexpress HER2 which drives the cancer cells to grow and divide. Investigators have shown that the HER2-targeted treatment, trastuzumab (Herceptin) improves both disease free survival and overall survival in women with early stage HER2-
positive breast cancer. It is used in combination with chemotherapy as an adjuvant treatment and it has dramatically changed the overall survival of this type of disease. A number of additional questions have been asked, including whether trastuzumab is better when given concurrently with chemotherapy or sequentially (after chemotherapy). The NR831 study showed that concurrent works better than sequentially. One year has been shown to be the best compared to two years or 6 months, and is currently the standard of care.

There are additional targets that are being inves-
tigated for HER2+ disease that are once again being investigated in the metastatic group of patients. Pertuzumab, trastuzumab, and docetaxel was compared against trastuzumab, a placebo and docetaxel. Progression-free survival and overall survival is better in this initial study for patients with previously untreated HER2+ metastatic breast cancer who received this drug. As of 2012, this has become a new standard of care for HER2+ stage IV disease. There are other treatments being used or evaluated in stage IV disease that may soon be used in the care of patients with early stage disease. Some of these include laptinib and chemotherapy, trastuzumab or lapatinib plus other chemotherapy or endocrine therapy. Soon T-D1M (trastuzumab emtansine) will also be used. Finally, afatinib and everolimus are also under investigation. The point of mentioning all these drugs is that there are many advances being made and what may currently be available in the widespread disease arsenal of targeted treatments could be added to the arsenal of early stage breast cancer care, which will help personalize the treatment and reduce the likelihood of this disease occurring.

**Triple Negative:** Triple-negative breast cancer refers to any breast cancer that does not express the genes for estrogen receptor (ER), progesterone receptor (PR) and HER2. Triple negative breast cancers comprise a very heterogeneous group of cancers and require a more aggressive treatment. Triple negative breast cancers have been less stud-
ed and more research is needed for this aggressive tumor type. The standard of care for early stage disease is chemotherapy. Targeted agents are also being studied. Stage IV disease can be stabilized with chemotherapy. Clinical trials are evaluating PARP inhibitors, aurora kinase inhibitors, C-met inhibitors and a blockade of inhibitors of apoptosis (IAP) proteins—all potential treatments.

Clinical trials are not just for patients with advanced disease. There are many new trials opening up and be-
ing brought to UCLA for patients with early stage dis-
ease as well. Systemic treatment is still necessary and a very important area for personalized care.

**Radiation Therapy**

Radiation therapy is considered the standard of care for virtually all women who undergo breast conserva-
tion surgery. Radiation therapy consistently decreases the risk of a recurrence in the breast by 50-70% which translates into a breast cancer specific survival benefit. Radiation works by damaging the DNA of cancer cells, the genetic material that controls how cancer cells grow and divide. Cancer cells die due to their inability to repair the DNA damage.

When a patient meets with their radiation oncologist, the first consideration is to define the target for treat-
ment—whole breast or partial breast radiation. The tried and true way is to use a large field or a smaller field for partial breast radiation. It lasts approximately 6 weeks and is given daily, Monday through Friday, for 10 minutes per day. The goals of modern whole breast radiation treatment planning are to optimize the dose homogeneity, which reduces skin effects, and dose conformity, which re-
duces the dose to underlying heart and lungs.

Treatment planning is critical and begins with a CT scan in the treatment position. The CT scan allows for the radiation to be customized to each individual’s anatomy, i.e., it helps to direct where the beams need to go and what they need to avoid. During planning, special techniques can be used to create a more ho-
modeling or even distribution of radiation. A custom tomotherapy machine can be used to target the beams more precisely. The same is true for a Brachytherapy technique. Once the beams are delivered, they are typically immediately absorbed by the body. A radiation oncologist or physicist then reads the treatment plan and can make changes at any point in the treatment schedule. Once the plan is approved, the patient begins the radiation therapy.

Radiation planning is a complex process that involves not only the radiologist but also the radiologic technician, the radiation therapist, and the radiation oncologist. The treatment plan is reviewed by the radiation oncologist and the radiation therapist, and changes are made as necessary. Once the treatment plan is approved, the patient begins the radiation therapy.

The patient will wear a lead shield to protect the area surrounding the treatment field. The patient will lie on a bed and be moved into position every time. Patients can sometimes get red, irritated skin or have a tanning effect. Some patients experience breast skin peeling, in the same way it might after sunburn. Depending on the radiation on-
cologist and position of the tumor, patients may be asked to breathe deeply and hold it, what we call deep inspiratory breath hold, to move the heart out of the radiation field during the treatment, thus reducing the likelihood of damage to the heart. Sometimes women who have large breasts will be asked to lie down on a table, face down, with an open area for the breast to hang rather than lying on their back, thus alleviating skin folds and also reducing the chance of the heart or lungs being in the radiation field.

Several options are available to shorten the overall du-
eration of radiation thus improving patient convenience. One such option is hypo-fractionated whole breast rad-
iation in which larger doses are given per day over 3 weeks, Monday through Friday for 10 minutes per day. This method is suitable for women who have less than a 5 cm node-negative breast cancer, no chemotherapy and smaller breasts.

A second option is accelerated partial breast irradiation (APBI). The rationale for this method is that the majority of breast recurrences occur at or near the lumpectomy site. The advantages are that (1) it is more convenient because it is given over one week, and (2) less nor-
turnal tissue is exposed to the radiation. It is suitable for women who are over the age of 60, have a tumor less than 2 cm, are node- and margin-negative and have favorable features such as ER+ and no LVSI.

Since APBI delivers radiation to a limited volume of tis-
sue (partial breast irradiation), a higher dose of radia-
tion can be delivered in a shorter period of time. There are a number of techniques for APBI delivery includ-
ing external beam, interstitial or intracavitary brachy-
therapy, and intraoperative radiation therapy. With in-
terstitial APBI, multiple catheters are placed into the breast. Intracavitary brachytherapy, including MammoSite and SAVI, are single catheter approaches. There is also external beam APBI which is done by delivering a single fraction to the partial breast thus avoiding the need for invasive catheter insertion. Intraoperative radiation therapy refers to partial breast radiation delivery in a single fraction at the time of the surgery. These may change how breast radiation is given; however, we are still conducting research into these methods and they may not be appropriate for all women.

Radiation therapy is a critical component in the stan-
dard management of early stage breast cancer. Women today benefit from a multitude of advanced treatment planning techniques intended to minimize side effects and maximize convenience.

**Summary**

Women with breast cancer need a team of profession-
als to assess their individual characteristics and match those to the best therapeutic approaches. A personal-
ized approach guarantees that women’s preferences and needs are taken into account and the most up-
todate strategies are used to eradicate the breast cancer and increase the likelihood that it will not recur. Breast cancer is not just one disease, and thus needs the mul-
disciplinary approach and evaluation. Women should be encouraged to understand and evaluate their options. It is important that patients receive the most informed options for their best care.
The journey of AYA Cancer Survivorship is defined by movement. Being a survivor is not a fixed state; rather it is a fluid and evolving identity. It is processed differently at different stages of the survivorship continuum and at different points in an individual’s life trajectory. And it is marked by both periods of stability and sense of mastery over the experience, and just as unexpectedly, events that propel one into a period of vulnerability and uncertainty about what is ahead.

For the purposes of this talk, we will refer to three stages of the Survivorship Trajectory—each with its own challenges. The Initial Transition to Survivorship begins with the end of treatment and the beginning of the recovery process. It is typically understood as between 6-12 months. Ongoing Survivorship, from six months to two years, is the period of learning to define the “new normal” and make the necessary adjustments to living after a cancer diagnosis. And last, Long-Term Survivorship, understood as any point after two years, is the time during which individuals come to understand the unique dimensions of their own survivorship.

Each stage presents its own psychosocial challenges for young people specifically through the AYA survivor population. The Initial Transition to Survivorship is marked by the loss of the treatment structure, the schedule of treatment and the security that it provides. Often, the first fears about the uncertainty of remaining cancer fear emerge in this time, and any new symptom can trigger worries about recurrence. This can be an especially isolating time, as many people in the young cancer survivor’s support system can focus on the success of completing treatment and wanting the young survivor to put the cancer experience behind him or her. Survivors often say it is difficult to balance this perspective with their own feeling that they are not anywhere near “back to normal.” For AYA survivors, much can change in their peer groups’ lives in a short period of time—friends may have graduated or moved to start new jobs or married in the time that a young person is going through treatment. The feelings of isolation can be that much more pronounced when individuals feel out of step with the developmental trajectory of their peers.

The psychosocial challenges in Ongoing Survivorship are the challenges of defining the new normal, which now also includes regular scans, potentially worrisome test results and, in time, avianessories of important and emotionally charged dates, such as when you were di- agnosed or went through surgery. These can all trigger periods of renewed anxiety and unexpected emotional disruption. In this phase of treatment, individuals are also dealing with the ongoing late effects of treatment such as ongoing fatigue or chronic low back pain or negative changes due to chemotherapy or changes to one’s functioning due to endocrine treatment. These changes can be frustrating as it is difficult for anyone to predict how long they will persist, and they serve as reminders that the cancer experience is not done. Perhaps the most difficult triggers in this phase of survivorship are those that come from outside one’s own experience—whether it is a news story about cancer or word of a cancer friend’s recur- rences—they can take a good day and fill it unexpect- edly with cancer related sadness and anxiety.

Long-Term Survivorship presents challenges for a young cancer survivor in navigating new life transi- tions. These include the initiation of a new job and need to maintain health insurance, beginning a promis- ing new relationship and the questions that might present about fertility. Any new developmental mile- stone, including those that mark happy, promising events can introduce challenges related to being a cancer survivor. For young survivors, so many more of those milestones remain to be met as survivors and represent uncharted territory.

It is no wonder that anxiety and depression are higher among AYA survivors than in the adult survivor popu- lation, as is the incidence of suicidal ideation. Up to 25% of young adult survivors experience clinically significant symptoms of anxiety and depression. These symptoms of anxiety include being unable to control worries, not being able to distract oneself as needed, experiencing palpitations, shortness of breath, and/ or becoming preoccupied with certain rituals or be- haviors as an attempt to manage worries. Symptoms of depression include feeling sad, fearful or unable to enjoy pleasurable things for two weeks or more. Other symptoms can include disruptions in sleep, appetite, low energy, feelings of guilt or worthlessness, and any thoughts of suicide. While it is normal for all survivors to struggle with complex feelings, and to struggle with the various challenges of navigating life after cancer, it is not appropriate for anyone to feel afraid for their safety or wellbeing or feel that they are alone in these struggles. There are many avenues for finding assistance and support, and it is strongly encouraged that if a young survivor is experiencing these symp- toms that they inform their medical team to begin the process of getting the needed help. Their health care team can direct them to AYA specific support groups to help reduce feelings of isolation.

Meeting with a knowledgeable therapist who under- stands AYA survivor issues can be helpful in process- ing complicated feelings and developing new coping skills. If needed, individuals may be directed to meet with a psychiatrist, as well, who can assist in treating the symptoms of depression or anxiety with appro- priate medication to help someone get back on track.

Young survivors of cancer have some unique features that can complicate their course toward healthy sur- vivorship. Young people report that they frequently coped with the many difficult experiences of a cancer diagnosis and treatment by being stoic and being per- ceived by family and their doctors as “a good soldier” or “trooper.” This coping strategy can be difficult to move beyond when they finish treatment and move on with their lives. Young survivors also speak of having very high standards for themselves and a need to make even more of their lives because they are aware that others did not survive their battle with cancer. These attitudes, while helpful in getting through some challenges can also make it hard for AYA survivors to express more dif- ficult feelings or to ask for help when they might need it. Because they may not have developed other ways of coping, life after cancer can feel full of frustration and stress. Sometimes, individuals can respond with impul- siveness, anger, or risk-taking behavior.

In addition to these unique challenges, AYA survi- vors also gain specific strengths that can assist them throughout their lives. These include a greater life perspective than others their age and a correspond- ing sense of compassion for others who may be strug- gling. Young survivors have a demonstrated capacity for perseverance and resilience, and the ability to live with uncertainty, which is a fact of life for all humans. When young survivors can take the time to assess how being a cancer survivor has shaped them, they have the opportunity to develop better ways of coping with the ongoing challenges it presents and to make the most of the gains they have so richly earned.

We will close this discussion about AYA cancer with the words of one young cancer survivor: “If being a cancer survivor is something I have to live with, I would rather not have it be a weight in the water that is always dragging me off course, but rather see it as an extra sail that I have to adjust to get where I am going.”

The Internet is full of articles, misperceptions, and claims that focus on the relationship between cancer cells and sugar. Unfortunately, anyone can post anything on the Internet, and there is no filter for the facts. Just because something is on print or on the Internet does not mean that the information is accurate or meaningful. It is im- portant to turn to real science to understand what we know. An excellent source for cancer information is the NCI website www.cancer.gov. Many patients want to un- derstand what they can do to help themselves in reduc- tion to traditional cancer treatments. It is important to understand that there are no miraculous cures for cancer to be found on the Internet—if there were any miracle cures the scientific community would be using them. Conventional medicine still has the best treatments available for the reduction of cancer growth. However, complementary and alternative medicine practices (CAM) can be important and supportive adjunctive mo- dalities. It is important to use the same scrutiny that one demands of traditional treatments to examine the value of these other approaches. You carefully should read the literature being published. There are important avail- able data on the Internet related to diet, acupuncture, massage in cancer prevention, symp- tom management, and well-being; there are, however, equal amounts of inappropriate and misleading data and suggestions! There are important facts that every patient should investigate, e.g., acupuncture appears to be beneficial in reducing treatment-related symptoms; shark cartilage is very good for sharks but does not ap- pear to improve cancer outcomes in humans; massage may benefit patients with cancer related fatigue; Laettie (laetitiaown-lactin-beta-glucosinolate) is ineffective against cancer at best and may be potentially harmful; and garlic may not lower bad cholesterol as originally thought nor does it appear to have an impact on colorec- tal cancer. These are just some of the medical mira- des, or myths, which you can find on the Internet. Some claims are, however, significant. Low-fat diets may have a role in lowering the likelihood of cancer recurrence for women with breast cancer, but the mechanisms are not yet clear. Losing weight by cutting calories can reduce
HOW HEALTH CARE REFORM AFFECTS PATIENTS WITH CANCER

SHAWN KRAVICH, ASSOCIATE DIRECTOR, CANCER LEGAL RESOURCE CENTER, PART OF THE DISABILITY RIGHTS LEGAL CENTER ASSOCIATED WITH LOYOLA LAW SCHOOL, LOS ANGELES.

This is a summary of a lecture presented on September 28, 2013.

Health care reform (the Affordable Care Act — ACA) has been part of the political discourse for some time; however, there are many changes that have already been implemented and more that will be.

What is the Cancer Legal Resource Center (CLRC)?

The CLRC has as its mission, “To provide information and resources on cancer-related legal issues to cancer patients, their families, and their caregivers.” It is a national telephone assistance line (1-866-843-2572), and there is an online intake form at www.clrcintake.org that allows an individual to write out their questions and receive a return call with information on specific laws that may affect his or her concerns. All of these resources can be found at www.CancerLegalResourceCenter.org.

Health Reform Today

On March 23, 2010, the health care reform laws were signed governing a wide range of changes in how people will access their health care. Some of the changes began immediately and some will not be fully complete until 2020.

One of the first issues to understand is which policies have to comply with the new laws. Most group and individual plans are impacted; however, the changes have to be looked at individually for TRICARE health plans that affect the military, Medicare and Medicaid (Medi-Cal in California), Flexible spending accounts (FSA) and Health Savings Accounts (HSAs), and Indian Tribal Governments. The new policies may or may not apply or may apply differently to these group/plans.

Grandfathered Plans

The next piece of information to understand is “Grandfathered Plans.” Some of the new reforms do not apply to plans that meet criteria for being grandfathered. If a policy was issued prior to March 23, 2010 (before the ACA was passed) it is considered a grandfathered plan and, therefore, some reforms will not apply. Plans will lose their “grandfathered” status if they significantly cut/reduce benefits, raise co-insurance charges, raise co-payments, significantly raise deductibles, lower employer contributions, add/limit annual limits, or change insurance companies. Some of the issues discussed in this article do not apply to plans that were grandfathered. It is also important to note that the date of March 23, 2010 does not refer to when you might have been hired by an employer and started receiving benefits, but rather to when your employer signed their contract with their health care company. As many as 50% of the pre-March 23, 2010 plans have already lost their grandfathered status and plans are required to notify beneficiaries if they believe they maintain grandfather status.

Type of Insurance Plan

Most people with private insurance are covered by an employer-sponsored group health plan. This means you and your family enroll in a plan through work and the employer often makes a contribution toward the monthly premium in a group plan. An individual plan is health insurance you purchase directly from an insurance agent or broker, and you pay the entire premium yourself.

There is more than one type of employer-sponsored plan. A self-insured plan is one where employers pay directly for an employee’s health care (usually only large companies). An “insured plan” is when employers contract with an insurance company to pay their employees with health care coverage. An employer-sponsored health plan is “insured” if the employer purchased health care coverage from an insurance company. It is “self-funded” if the employer pays for the health care costs of its employees directly, rather than purchasing insurance from an insuring organization.

It is sometimes difficult for consumers to know whether their employer-sponsored plan is insured or self-funded. You may think your coverage is from a health insurance company, but if you work for a large employer, those insurance companies may not actually be insuring you. Instead, they may simply process the claims as a third-party administrator for your company’s self-funded plan. To find out whether your employer-sponsored plan is self-funded or not, ask your human resources representative about what type of plan you have. Not all provisions in the ACA apply to self-insured plans so it is important to understand what type of plan you have.

Annual and Lifetime Limits

Before the ACA, many insurance plans had low lifetime and low annual limits. What this means is that the insurance company would set a maximum amount that they would pay in a single year and also over the lifetime of the policy. For some policies these limits were quite low. For example, if your annual maximum limit was $50,000, once the insurance company had paid that amount for the year, the rest of your health care needs would become your responsibility. With a diagnosis of cancer, a $50,000 limit could be used by one treatment or procedure. The ACA ultimately will eliminate lifetime and annual limits on all insurance plans. Since September 23, 2010, insurance companies may no longer impose “lifetime” limits on their beneficiaries for essential health benefits. Essential health benefits include things like emergency care, hospitalization, prescription, emergency care, and so on. This restriction applies to grandfathered plans as well as self-insured plans.

Recission

The ACA has stopped recissions—the process of canceling an individual’s health insurance once a claim of substantial amount is submitted. Insurance companies have departments whose purpose was to go back through people’s applications and find any mistake or omissions, then rescind the policy. The policy could retroactively cancel an individual’s policy after he or she got sick—leaving them uninsured. You may have heard the term “post-claims underwriting”—it was a common practice to avoid paying out claims. Insurance plans can no longer do this, and it applies to grandfathered plans as well as self-insured plans.

The ACA now prohibits any insurer from rescinding someone’s plan unless they fail to pay premiums, commit fraud, or make an intentional misrepresentation (i.e., lied) on their application for coverage. Some examples of fraud or Intentional Misrepresentation of Material Fact could include claiming a non-spouse as a spouse, or an ineligible individual as an eligible dependent. It could also include omitting relevant information about prior medical history, although in 2014 that will no longer be an issue. In addition, there is now a 30-day appeal process for all plans so if your policy is canceled, and you think this was done inappropriately, you have 30 days to make your case and to appeal the decision.

Changes to Preventive Care

In the past many plans did not provide preventive care without cost. Under the ACA, preventive services, such as colorectal cancer screening for individuals over 50, diet and obesity counseling, HPV immunizations, or genetic counseling for BRCA genetic screenings will be covered with no deductibles and no co-payments but only for plans that are not grandfathered. However, once you have a particular type of cancer then screening for that type of cancer no longer falls under the provisions of the ACA. More information about what is covered regarding preventive care can be found at www.healthcare.gov.

Expanded Coverage for Children and Young Adults

Children can now be covered under their parent’s plan until the age of 26. On January 1st, 2014 a “child,” defined as being under 26 can still be carried on their parents’ health plan even if they have employer-sponsored insurance. A “child” does not need to be claimed as a dependent by the IRS. Even if a “child” is married they will be able to be covered under the parent’s health plan until age 26 although their spouse or children cannot be covered. This does not apply to individuals on the TRICARE plans. In 2011 alone, 2.5 million “children” were enrolled on their parents’ health insurance because of this new provision.

Beginning September 23, 2010, children under 19 could no longer be denied health insurance coverage based on a pre-existing condition. This applies to grandfathered group plans and self-insured plans but not individual plans.

Appeal Rights

For plans and policies beginning July 1, 2012 individual had to receive notification of the reason for a denial of coverage and information about rights to appeal. The insurer must respond to the appeal in 72 hours for an urgent request, 30 days for a non-urgent request, and 60 days for denial of payment for services already received. This applies to self-insured plans but not to grandfathered plans. These are internal appeals rights. If your request is urgent or expedited patients should use the words urgent or expedited and be clear that you are demanding the faster timeline or it will not happen. This really has not changed anything in California because this state already had internal appeals for state regulated and ERISA plans.

As of January 1, 2012 all self-insured plans but not grandfathered plans require an independent medical review board for external appeals. After your insurance company responds to your request, you have at least 60 days to file for an external review (some states give more). Expedited appeals are responded to in four days. This does not replace California’s more extensive laws and in California this only changed self-insured plans as state-regulated plans already have an external appeals process.

You may file for an expedited appeal at the same time you file for an internal appeal—if urgent, you do not need to wait for a final decision from your health plan.
Medicare Improvements
One of the biggest changes to Medicare is that it now guarantees coverage for preventative services (e.g., mammograms and colonoscopies) with no copayments or deductibles. In addition, it will cover an annual wellness visit that includes a personalized comprehensive health risk assessment.

The second significant change is that in 2014, Medicare Advantage Plans will no longer be able to make large profits based on not providing services. The medical loss ratio will be held to 85%, which means that the plans can only profit 15% above the cost of delivering the services and administering the plan. There are also cost controls to help keep Part B premiums down.

Part D, the section that covers medications has had what is referred to as the "donut hole" in which individuals have to pay for 100% of their medications at times. This gap in coverage will be shrinking from 100% to 25% by 2020.

The Long Term Benefits 2014-2020
Looking forward there are many changes that will begin on January 1, 2014, which will be added to in some circumstances replace the changes listed above. These are described below:

Pre-Existing Conditions: Adults
Insurers can no longer use pre-existing conditions (physical or mental) to determine cost of health care or deny coverage for anyone. This includes health status, medical history, genetic information, and gender. For years, women have been charged higher rates than men with no apparent business rationale behind this. This will have to stop. Your age and where you live are the only personal characteristics that can be used to set rates.

Clinical Trials Post ACS
Health insurance must now cover routine costs of medical care when someone is on a clinical trial; thus they cannot discriminate against someone for participating in a clinical trial. They are not obligated to cover investigational treatments, devices or service itself or any items/services solely related to collection of data.

Individual Mandate
This is probably one of the most discussed, and therefore, most controversial parts of the law. Citizens and legal residents of the United States must have health coverage and if they don’t there will be penalties with adults paying more in penalties than children. The Supreme Court upheld the Individual Mandate, stating that Congress does have the power to tax people via the Spending Clause. There are some exceptions to this mandate. For example, a break in coverage of less than three months will not be penalized. Also, there are exceptions written into the law for religious objections and financial hardship (i.e., the required contribution to pay premiums would exceed 8% of household income). Also, Native Americans, undocumented immigrants, and people who are incarcerated are exempt from this law.

Insurance Affordability
When setting premium rates, insurers can only consider whether insuring an individual or family, the ages, and the geographic location. There are seven geographic areas in California. In addition, tobacco users can be charged up to 1.5 times as much. The geographic location will take an average of the costs of health care for people in that particular area.

Covered California
Covered California is the name for these new plans, sometimes referred to as exchanges. It is the new, easy-to-use marketplace where you and your family may get financial assistance to make coverage more affordable and where you will be able to compare and choose health coverage that best fits your needs and budget. People can start registering as of October 1, 2013; however, these plans will not take effect until January 1, 2014. It can be found at http://www.coveredca.com. Covered California will provide the tools for you to shop for health insurance that meets your health care needs and financial realities. The ACA provides a number of ways for individuals and employers to help make coverage more affordable. For individuals, financial assistance is available on a sliding scale with more support for those who earn less. Covered California will help you determine if you qualify for these types of assistance programs.

There are different types of plans with the most expensive and most coverage of the platinum plans followed by gold, silver, and bronze. Beginning in 2014, tax credits will be available for people under age 65 who purchase coverage on their own in a health insurance exchange and are not covered through their employer, Medicare or Medicaid. Premium subsidies will be available to help pay people for health insurance making certain that premiums are based on a sliding scale from 2%-10% of your income for individuals whose incomes are between 133% and 400% above the Federal Poverty Line (FPL). Income under 400% of the FPL in 2013 is $45,960 for an individual and $94,200 for a family of four. You must enroll in the plans at Covered California to get these subsidies. These subsidies are tax credits that are automatically applied to the cost of your health plan when you enroll. This means you do not have to wait until you file your income tax to receive these. Tax credits will be adjusted at the end of the year based on your actual income; so, if your income differs from what you anticipated, you should notify Covered California of these changes during the year.

In addition to the tax credits that reduce your monthly premium payments, you may be eligible for cost-sharing subsidies that reduce the amount you pay when you get care. Eligibility for subsidies is based on income level and family size. You may be eligible for subsidies if your income is less than about $27,936 for a single person and less than about $57,636 for a family of four in 2012, which represents about 2.5 times the federal poverty level. Cost-sharing subsidies are offered by the federal government to reduce the amount of money you have to pay for health care expenses such as copayments or coinsurance.

Medicaid Expansion
The State of California has already begun early expansion of the state’s Medicaid program (called Medi-Cal in California) to cover people under age 65, including people with disabilities, with income of less than $15,000 for a single individual and $31,180 for a family of four (e.g., at 138% of the Federal Poverty Level or below). The coverage is free for those who qualify and part of the provisions of the Affordable Care Act.

The Supreme Court’s decision on the ACA limits the mandate for Medicaid expansion, which means the states must voluntarily agree to accept more funding for expansion. Most states are choosing to roll out an expanded Medicaid plan although there is variability from state to state. California is one of the states that do not have any new requests for Medi-Cal and has been transitioning people into Medi-Cal. Every county except Fresno has been doing this. The advantage of this action is that it incorporates more people into the system over time rather than having a large onslaught on January 1, 2014.
“My experience at the Simms/Mann Center continues to be invaluable for me and my partner. Everything we have experienced here has helped us to cope, manage, survive, live, laugh, become more resourceful and vocal.”

“I deeply appreciate the vast array of resources that were offered to me gratis at the lowest point in my life. The help I received enabled me to continue functioning in my daily life. Without it I wouldn’t have been able to work or take care of my family. Many thanks!”

We are grateful to be able to provide the kind of care reflected in these patient comments because we do understand that medicine alone is not enough and cancer affects more than just one’s physical condition.

We are able to do this only because of the generosity of many. We need your generosity in order to be here for the next patient or family member who is diagnosed with cancer. We hope that, as you read through our newsletter and think about what we offer, you will help us continue to provide so many services without fees to patients and families touched by cancer. In order to maintain our programs we need voluntary donations from you, your friends, and your family. Voluntary donations of any and every size are meaningful and necessary.

We know not everyone can make substantial donations, but every donation helps. You could be an important conduit to company giving, foundations or even a collection of caring and compassionate individuals who want to help support you and others like you through this experience.

We hope that every patient and family member who has contact with the Center will make at least one donation each year to the extent of their ability! If you have benefited from our services, consider taking part in our Birthday Fundraising program, which asks our Center advocates to reach out to their network of family and friends, asking them to donate to the Center during the month of your birthday. You can set any fundraising goal that you like, and our staff is here to help with all of the resources that you need to meet that goal. No donation is too small – every dollar you raise will help a patient, care giver, or family member receive counseling, help fund a support group, or make it possible for the center to provide education programs such as the Insights Into Cancer lecture series.

It costs approximately $1,000 to provide the range of services that we offer to each patient or family member who receives our services without charges. You can become a member of the “One-to-One Club” by making an annual donation of $1,000 (just $34 per month) or more depending on how many individuals you wish to sponsor for the next year. One-to-One members are included in some of our special events and may reserve seating at our Insights Into Cancer lectures. We hope you will consider joining this important group of donors!

Members of our Advisory Board make annual donations of a minimum of $10,000 for at least three years. This is an excellent opportunity to be involved with a wonderful group of individuals who are highly motivated to help the Center maintain its leadership in the field of integrative oncology. You or someone you know may be able to make such a commitment. Please contact the Center Director for more information.

For those who may not be able to make gifts at this time, an estate gift is another way to continue our free services into the future. The Simms/Mann Center is not endowed and is not funded by the University or the State—we depend on your generosity.

“How will we use your gift?”

You may designate your gift for general operational support which funds the oncology social workers, chaplain and psychologists that are available to you and your family. You can also help underwrite the costs of any of our programs: support groups, Insights Into Cancer lectures, newsletter production and mailing, and/or Reflections.

“What forms may my gift take?”

Gifts and pledges may come in the form of cash, checks, and securities. We also accept Visa, MasterCard and American Express as forms of payment. We gladly accept matching gifts from your place of employment. Gifts can be given in honor and in memory. Estate planning is also essential to our existence, now and in the future. Please talk to us about incorporating us into your long term estate plans and become part of UCLA’s Second Century Society.

“Procedure for making a gift to the resource center”

To make a gift to the Center, complete one of the gift envelopes available in the Center’s lobby or in Reflections, or send us a brief note stating the purpose of your gift, your name and address. You can pay by credit card or check payable to the JCCF/Simms/Mann Center. You will receive a letter of acknowledgement from the Center and tax acknowledgement from the Foundation.

You can also make a donation online at our website: www.simmsmanncenter.ucla.edu/support/section/donate_now.asp

If your gift is in memory or in honor of another person, please include the name and address of the person who should be notified. We will send a letter to that person stating that a gift has been received. The amount of the gift will not be disclosed. Our website and newsletter includes lists of the names of those who have made a donation to our Center during the past fiscal year. The exact amount of the gift is not publicized although we publish ranges.

Please send your donation envelopes or letters to:

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If you have any questions or would like more information, call us at 310-794-6644. Thank you for your support!
INSIGHTS INTO CANCER

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Encourage your friends and family to log on each month and see our lecture. Of course, we hope you will join us because then we get to ask you questions and we love seeing you there!

November 19, 2013

SARCOMAS: TREATING RARE CANCERS WITH TARGETED THERAPY - Arun Singhi, MD, UCLA Clinical Instructor and Co-Director of the Medical Oncology Sarcoma Program, reviews the diagnosis, treatment and follow-up care of patients diagnosed with sarcomas—a spectrum of rare diseases. He discusses the importance of the multidisciplinary approach in caring for patients with these malignancies. He presents the evolving biologic understanding of sarcomas and how these new insights are leading to the development of the next generation of therapies for these patients.

December 10, 2013

PROSTATE & OTHER MALE CANCERS: IMPACT ON ERECTILE FUNCTION & QUALITY OF LIFE - Jonathan Berman, MD, UCLA urology physician and surgeon, discusses the impact of prostate and other urologic cancers in relation to treatment decisions and their impact on quality of life. Specifically, symptoms such as erectile dysfunction and changes in urinary habits are two of the most common concerns and men often do not know where to turn for information on decision making, treatment options and symptom management. These symptoms and potential treatments are discussed with a focus on patient-centered quality of life improvement.

January 14, 2014

SEXUAL HEALTH CONSIDERATIONS FOR THE CANCER PATIENT AND THEIR PARTNERS - Michael Krychman, MD, Executive Director of the Southern California Center for Sexual Health and Survivorship Medicine discusses sexual rehabilitation medicine, an emerging field of study that addresses intimacy concerns for the cancer survivor and his or her partner in order to maximize overall quality of life considerations. Sexual dysfunction, during or following cancer therapy, is a complex group of disorders that can compound an already stressful life event. A comprehensive sexual medicine evaluation combined with sexual rehabilitation therapies promotes healthy sexual functioning by fostering open communication, validating sexual thoughts and feelings, and rectifying biologic abnormalities. Many medical and non-medical interventions are discussed and presented.

February 11, 2014

NEW DIRECTIONS IN LUNG CANCER CARE - Jonathan Goldman, MD, UCLA Assistant Professor, Director of Clinical Trials in Thoracic Oncology, Associate Director of Drug Development at UCLA discusses recent developments in lung cancer care, including exciting recent advances in targeted therapy and immune therapy. He will review the current chemotherapies and explain how the newer drugs may be incorporated into treatment plans. He will also discuss how clinical trials are developed, and explain how and why they may be helpful in a patient’s care.

March 11, 2014

HOW TO BECOME A TAKE-CHARGE PATIENT THROUGH CANCER - Martine Ehrenclou, M.A., award-winning author, patient advocate, speaker helps patients and caregivers learn to cut through the red tape and navigate today’s complex health care system with confidence. Using the wealth of researched strategies from over 200 doctors, nurses, pharmacists, medical professionals, and patients outlined in her newest book, The Take-Charge Patient, she discusses effective strategies that empower patients and caregivers to be proactive, assertive, and well informed participants in their own health care. Books will be available for signing.

April 8, 2014

CANCER, WELLNESS, AND THE IMMUNE SYSTEM - Carolyn Katzin, MS, CNS, Oncology Specialist Simms/For Mann – UCLA Center for Integrative Oncology, and Robert Schiestl, Ph.D., Professor Pathology and Environmental Health and Radiation Oncology discuss nutrition and cancer with particular emphasis on how the “microbiome of the gut” may be a key factor in protection against cancer or in the development of cancer. Recent research shows that how and what we eat are factors in immune function, prevention, and cancer development. In addition to this innovative research, they will present nutrition strategies to protect and enhance your health along with recommendations on supplement use before, during, and after cancer treatment. They discuss food as medicine.

May 13, 2014

THAT’S MY STORY AND I’M STICKING TO IT: MAKING SENSE OF THE CANCER JOURNEY - Jeff Tirenengel, PsyD, MPH, Professor of Psychology at the California School of Professional Psychology at Alliant International University offers a framework for making sense of the commonalities and differences in our stories about our cancer journeys, with illustrations from books, movies, and his own experiences as a psychologist, cancer patient, and family caregiver. The stories that we tell ourselves about cancer can affect our experiences of the disease. Although each individual has a unique path through the biological, psychological, social and spiritual challenges, we have points where our paths converge. Personal answers to such questions as “How should I live my life now?” can influence our moment-to-moment thoughts, feelings, behaviors and physiology.

June 10, 2014

PROSTATE CANCER: CONTROVERSIES AND OPPORTUNITIES - Robert Reiter, MD, MBA, UCLA Bing Professor of Prostate Cancer, urologist, and researcher discusses prostate cancer and its treatments. PSA screening has become more controversial in part because of the wide spectrum of types of prostate cancer; he discusses this controversy along with current and promising new approaches to retain the benefits of screening while avoiding its harms. He will review novel imaging techniques and molecular tests which help patients and physicians make more informed decisions. For those patients with aggressive forms of prostate cancer; he will present some of the newest research and advances in both diagnostic testing and drug development along with discoveries made at UCLA that have revolutionized the diagnosis and management of this disease.
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REFLECTIONS ONLINE STORE

Reflections® is a boutique that provides information, resources and products to help men, women and children manage the physical appearance changes caused by cancers and their treatments. Our staff are certified fitters of mastectomy bras, prostheses and lymphedema garments and have many solutions for hair loss.

Reflections® is located in Suite 163 on the ground floor of the 200 UCLA Medical Plaza. It is open to the public Monday – Thursday from 10am-5pm, Fridays from 10am-3pm. Reflections can be reached at (310) 794-9090.

Reflections® is a not-for-profit organization committed to providing an array of affordable services and products. Proceeds from the sale of goods support Reflections’ daily operations and those of the Simms/Mann-UCLA Center for Integrative Oncology.

Many insurance companies provide partial to complete reimbursement for breast prostheses. We also are a Medicare provider. We can assist you in obtaining authorization for covered services.