



Creating a New Paradigm in Gynecologic Cancer Care: Policy Proposals for Delivery, Quality and Reimbursement

**A Society of Gynecologic Oncology
White Paper**

February 2013

Table of Contents

Executive Summary	3
I. Introduction	6
Purpose of the Report	
Key Questions	
II. What is the Society of Gynecologic Oncology?	7
III. Delivering High Quality Gynecologic Cancer Care	9
Weaknesses in Current Delivery Systems	
Proposed Solutions for Optimizing Delivery Systems	
Resources Needed to Implement the Care Team Model	
Ultimate Outcome of the Proposed Care Team Delivery Model	
IV. Defining High Quality Gynecologic Cancer Care	18
Weaknesses in Current Quality Systems	
Proposed Solutions and Resources Required to Optimize Quality	
Measures and Improvement	
What will be the Ultimate Outcome of this Proposed Quality Improvement System?	
V. Payment Systems for Delivery of High Quality Gynecologic Cancer Care	24
Weaknesses in Current Payment System	
Proposed Solutions to Optimize Payment Systems	
Resources Needed to Facilitate a Demonstration Project Followed by Implementation of New Payment Systems	
Resources Needed to Facilitate a Demonstration Project Followed by Implementation of New Payment Systems	
VI. Summary	35
References	37
Appendix	39
Practice Summit Participants	40

Executive Summary

The increasing financial burden of cancer care negatively impacts the U.S. health care system, our nation's economy, and individuals' quality of life. More importantly, it contributes significantly to premature death. The current health policy environment for cancer care is built upon a system that often rewards volume and intensity of therapy rather than proper coordination and quality of care. Physicians are reimbursed based on a fee-for-service system that encourages overutilization of cancer care resources rather than comprehensive coordination of care by 1) appropriate specialists, 2) use of evidence-based therapies to guide cancer prevention and management decisions, and 3) integration of palliative care and end-of-life counseling. In addition, the term "quality cancer care" lacks a clear or consistent definition.

In June 2012, the Society of Gynecologic Oncology convened a Practice Summit of thought leaders in the field of gynecologic oncology to assess the health care system and policy environment as they pertain to the care of women with gynecologic cancers. During the Summit, these leaders identified weaknesses of the current health care system, devised solutions to the problems that SGO members face in providing high quality, cost-effective care to women with gynecologic cancer, and proposed policy revisions that will affect the incorporation of these needed changes in the health care system. This report is the result of that effort.

The White paper addresses the following questions:

- 1) How should high quality gynecologic cancer care be delivered?
- 2) How should high quality gynecologic cancer care be better defined?
- 3) How should the delivery of high quality gynecologic cancer care be fairly compensated?

Delivery Systems

SGO proposes that the care of a woman with a suspected or diagnosed gynecologic cancer be structured like the patient-centered medical home model and be coordinated by a single health care provider (a "team captain") with multidisciplinary training in the care of women with gynecologic cancer. We envision the team captain directing a group of health care professionals, all working together on behalf of the woman facing a gynecologic cancer diagnosis. These professionals include radiation oncologists, medical oncologists, pain and palliative care specialists, pathologists, radiologists and primary care physicians; advanced practice providers; oncology nurses; oncology pharmacists; genetic counselors; physical therapists; and additional supportive care providers.

Defining High Quality Gynecologic Cancer Care

It is essential that women uniformly receive early access to the health care providers best qualified to care for women with gynecologic cancer. Next, measurable standards for high quality care for women diagnosed with gynecologic cancer must be determined, validated and tracked. SGO proposes the expansion of a robust clinical trials system for women with gynecologic cancer. A system that holds providers accountable for delivering higher quality gynecologic cancer care needs to be developed and tested based on these measurable standards. SGO calls for the use of demonstration projects, registry systems and funding for outcomes-based research. Ultimately this strategy lays the foundation for directing women with gynecologic cancer to providers dedicated to providing guideline-based therapies, for enhancing efforts to better measure quality outcomes, and to incentivize providers to use this information for continuous and real-time improvement in gynecologic cancer care.

Payment Systems

The current reimbursement system for gynecologic cancer care is cumbersome and not sustainable. It promotes disparities in gynecologic cancer care and does not reward high quality care. To a large extent, progress in the last decade in quality improvement projects has been achieved by voluntary efforts of health care leaders backed by financial support from philanthropists. Any further quality improvements will be unachievable with the current reimbursement model.

SGO proposes the development and testing of several payment systems:

- 1) A diagnosis-based episode of care reimbursement system in which payment would be based on each diagnostic episode of the woman's illness, rather than on specific procedures.
- 2) A diagnostic episode bundled payment system with an incentive for a team captain approach. This system would dispense a coordination fee for the team captain, distribute a percentage of the bundled payments based upon involvement of team members in the episode of care, and adjust payments based upon complexity of care and co-morbidities.
- 3) A bundled approach with no team captain approach, in which physicians would still bill for each diagnostic episode on a per-patient basis, but there would be no concept of a team captain. This approach may be suited for smaller or isolated communities that lack the components of a coordinated care team.
- 4) A diagnosis-based episode bundled payments approach as a modified capitation payment system. In this case, a gynecologic oncologist would be paid a monthly sum based on a

historical number of patients cared for. Future Medicare payments would be based on the number of patients seen in a year with a risk window of +/- 5 to 10%.

SGO also supports incentives for hospitals to become centers of excellence in gynecologic oncology. Finally, fair compensation must also be provided for care of complicated, benign gynecology and obstetric patients.

Conclusion

The solutions proposed by the SGO in this document provide a roadmap towards improving the quality of gynecologic cancer care, while reducing costs associated with unnecessary testing and inappropriate therapies. The SGO is committed to working with policy leaders to make the changes needed in our health care system. Together we can achieve meaningful reforms, rescue an economically unsustainable medical system, and improve health care for women with gynecologic cancer. Our patients deserve no less.

The Society of Gynecologic Oncology is a 1,600-member medical specialty society whose mission is to improve the care of women with gynecologic cancers by encouraging research, disseminating knowledge, raising standards of practice and collaborating with other organizations dedicated to women's health care, oncology and related fields. The SGO vision is to eradicate gynecologic cancers.

I. Introduction

Without a doubt our current health care system is going through major changes in knowledge, technology, organization, regulation and financing. **The increasing financial burden of cancer care is negatively impacting the U.S. health care system, our nation's economy, and an individual's quality of life.** In 2010, total costs for cancer care reached \$263.8 billion: \$102.8 billion from direct medical costs, \$20.9 billion from loss of productivity, and \$140.1 billion from premature death.¹ The current health policy environment for cancer care is built upon a system that often rewards volume and intensity of therapy rather than proper coordination and quality of care. Physicians are reimbursed by a fee-for-service system that encourages overutilization of cancer care resources rather than comprehensive coordination of care via appropriate specialists, use of evidence-based therapies to guide cancer prevention and management decisions, and earlier integration of palliative care and end-of-life counseling. In addition, the term "quality cancer care" lacks a clear definition. Also lacking are outcome data to support the appropriate coordination of care and reduced cost associated with use of guideline based care.

The emotional and financial toll of gynecologic cancers is monumental. In 2012, nearly 89,000 women in the United States were estimated to be diagnosed with a gynecologic cancer and nearly 30,000 deaths due to gynecologic cancer were anticipated.²

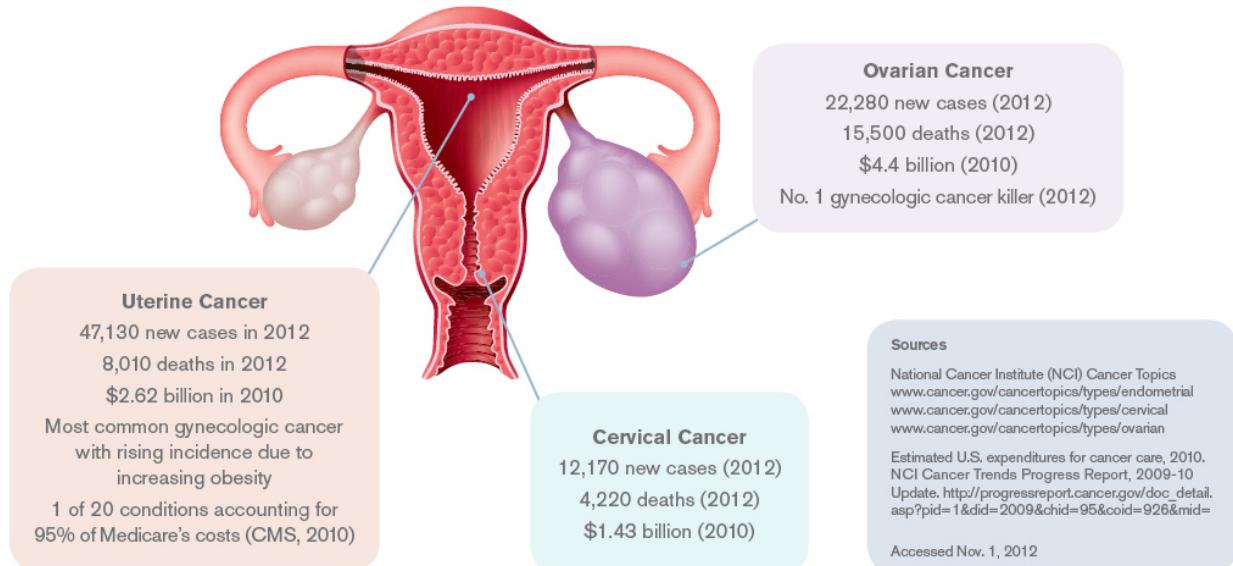


Figure 1. Gynecologic cancer statistics

These statistics trail only those noted for lung, breast, and colon cancer in women.

The challenges faced by health care professionals in caring for women with gynecologic cancer are a result of the very same issues plaguing the health care system at large. Health care reform's emphasis to find solutions for the delivery of better coordinated, high quality gynecologic cancer care as a means of reducing escalating medical costs may best be demonstrated by members of the Society of Gynecologic Oncology (SGO) as we work together in caring for women with these malignancies.

Purpose of the Report

- 1) To identify weaknesses of the current health care system as it pertains to the care of women with gynecologic cancer
- 2) To provide potential solutions to the problems that SGO members currently and will continue to face in providing high quality, cost-effective care to women with gynecologic cancer
- 3) To stimulate changes in policies that will affect the incorporation of these needed changes in the health care system

Key Questions

- 4) How should high quality gynecologic cancer care be delivered?
- 5) How should high quality gynecologic cancer care be better defined?
- 6) How should the delivery of high quality gynecologic cancer care be fairly compensated?

II. What is the Society of Gynecologic Oncology?

The Society of Gynecologic Oncology is a 1,600-member medical specialty society whose mission is to improve the care of women with gynecologic cancers by encouraging research, disseminating knowledge, raising standards of practice and collaborating with other organizations dedicated to women's health care, oncology and related fields. The vision of SGO is to eradicate gynecologic cancers. SGO has a diverse membership that consists primarily of gynecologic oncologists but also includes medical oncologists, pathologists, radiation oncologists, surgical oncologists, nurses, physician assistants, obstetrician-gynecologists, fellows-in-training and residents.

SGO is considered the premier medical specialty society for physicians trained in and dedicated to the comprehensive management of gynecologic cancers. SGO members provide longitudinal care for women from diagnosis, to surgery, to chemotherapy, through survivorship and palliative care at the end of life. SGO members are often involved in education and research that has a direct impact on patient care. Due to their extensive training in radical pelvic surgery, gynecologic oncologists in SGO are also commonly asked to care for women with medically complex gynecologic or obstetric situations requiring difficult pelvic surgery for nonmalignant causes. SGO members practice in a variety of settings, including academic institutions and hospitals, major regional cancer centers and private practice.

Because members of the SGO are the only practitioners that have unique training in gynecologic oncology and that provide comprehensive multidisciplinary care to women with gynecologic cancer, their practices are clearly the best environment to incubate and test new ideas for our health care system as it relates to gynecologic cancers.

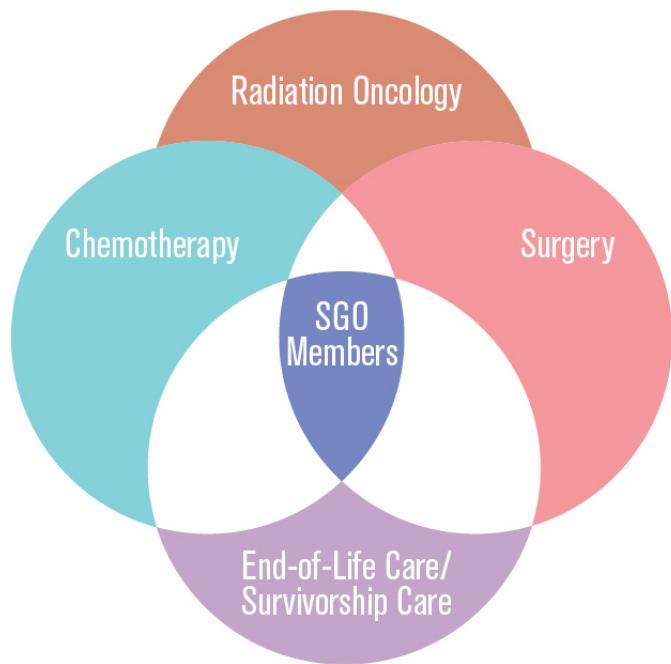


Figure 2. Multidisciplinary nature of SGO members

SGO members are committed to working with leaders in health care policy to address and provide constructive solutions to our current health care environment in order to elevate the care of women with gynecologic cancer while decreasing excess cost and waste.

III. Delivering High Quality Gynecologic Cancer Care

Weaknesses in Current Delivery Systems

- Women with gynecologic cancer generally do not receive care from those with the best training or experience.
- Care is often highly uncoordinated and fragmented.
- The supportive services required to care for women with gynecologic cancer frequently are not readily available and often undervalued.

Proposed Solutions for Optimizing Delivery Systems

- Develop and test a care model structured after the patient-centered medical home model and coordinated by a single health care provider (a “team captain”) with multidisciplinary training in gynecologic cancer.
- Members of the proposed team of health care providers would include physicians, advanced practice providers and other key health care providers.
- Gynecologic oncologists should serve (in most instances) as the single point of access for women with a suspected or diagnosed gynecologic cancer.
- Qualifications of the captain and team members would be continually monitored.

Resources Needed to Implement the Care Team Model

- Workforce needs require assessment and appropriate coordination and enhancements as required.
- The health care system requires realignment of incentives that promote referral of women with gynecologic oncology to the proposed team care model.
- Electronic medical record and telecommunication systems need to be further improved to facilitate access and coordination.
- Demonstration projects and registries need to be funded to further optimize the infrastructure and monitor the effectiveness of the proposed team care model.
- Continuing education on alternative health care delivery models should be fostered.

Women diagnosed with a gynecologic cancer are treated using a variety of modalities including surgery, radiation, chemotherapy and advanced imaging techniques. In addition, they may also undergo treatment on clinical trials or require palliative care provided in the hospital or home setting. Consequently, managing women with gynecologic cancer often requires implementation of complex treatment plans. Yet our current health care system has many weaknesses that hinder the implementation of these plans, negatively impacting the delivery of high quality care to these women.

Weaknesses in Current Delivery Systems

In general, women with a diagnosed or suspected gynecologic cancer do not receive care from those with the best training or experience.

It has been demonstrated that important patient outcomes, including survival, are improved when a woman with ovarian cancer is cared for by a gynecologic cancer specialist such as a gynecologic oncologist as opposed to other specialists such as a general gynecologist or general surgeon. In addition, multiple studies have demonstrated improved surgical outcomes when cancer patients are provided care by experienced surgical subspecialists in high volume hospitals. Goff et al³ reported that almost 50% of women with early stage ovarian cancer did not undergo the recommended surgical staging procedures. Earle et al⁴ demonstrated that women with ovarian cancer were more likely to undergo comprehensive staging procedures such as lymph node dissections for early stage disease as well as debulking procedures for advanced disease if performed by a gynecologic oncologist rather than a general gynecologist or general surgeon. Chan et al⁵ also showed that women with ovarian cancer treated by gynecologic oncologists were more likely to undergo primary surgical staging and chemotherapy and had lower rates of unstaged cancers. In spite of this evidence, **more than 50% of newly diagnosed women with ovarian cancer have surgery performed by less skilled surgeons in low-volume hospitals.**

Many women with endometrial cancer, the most common gynecologic malignancy, have several therapeutic options to consider and yet up to 50% of these women are managed by health care providers who are poorly equipped to make decisions about the appropriate surgical and adjuvant therapy for such women.⁶

Roland et al⁶ also demonstrated that women with endometrial cancer being treated by gynecologic oncologists were more likely to have the necessary surgical procedures for accurate

surgical staging. This information led to the reduction of radiation therapy recommended and minimized the potential morbidity while leading to an efficient use of health care resources. Chan et al⁷ also showed that women with endometrial cancer treated by gynecologic oncologists were more likely to have surgical staging performed, receive adjuvant chemotherapy for advanced disease, and have improved survival for those with higher stage cancers.

The care of women with a diagnosed or suspected gynecologic cancer is often highly uncoordinated and fragmented.

Women with gynecologic cancer who are under the direction of multiple providers either prior to or after being diagnosed often have diagnostic tests and therapies that are poorly or inefficiently coordinated between multiple settings. This often leads to lack of adherence to established guidelines, repeat testing, inappropriate treatment and added costs.

The supportive services required to care for women with gynecologic cancer frequently are not readily available and often undervalued.

The care of women with gynecologic cancer is ever more complex and requires coordination of pre- and post-hospitalization services, addressing acute and chronic symptom/pain management, and managing concerns regarding survivorship. Supportive services may include education provided by ancillary staff prior to chemotherapy or surgery. Additional services may be provided by physical therapists, lymphedema specialists, mental health professionals, social workers to coordinate care, genetic counselors, wound nurses, home health professionals, dieticians, nutritionists and financial counselors. Each professional will bring to the patient the set of specialized skills to provide high quality, comprehensive care. Constraints in available supportive services, in the number of skilled allied professionals, and in appropriate compensation for these critical ancillary services hinder our ability to ensure delivery of high quality care to these women.

Proposed Solutions to Optimize Delivery Systems

What would be the optimal strategy to address the above-noted weaknesses and to ensure that women with gynecologic cancer are provided only the highest quality of gynecologic cancer care? SGO proposes that the care of a woman with a suspected or diagnosed gynecologic cancer be structured like the patient-centered medical home (PCMH) model and be coordinated by a single health care provider (a “team captain”) with multidisciplinary training in gynecologic cancer. We envision the team captain directing a group of health care professionals (the team), all working together on behalf of the woman facing a gynecologic cancer diagnosis.

Captain of the Delivery Care Team

Together with the woman and her family, a gynecologic oncologist is often best suited to function as the team captain in this model.



Figure 3. The gynecologic oncologist as captain of the women's cancer care team

To re-emphasize, gynecologic oncologists undergo extensive subspecialty training that leads to mastery of complex surgical skills; experience in chemotherapy; and the ability to supervise radiation treatments, correctly interpret pathologic and radiologic tests, and provide compassionate end-of-life care. Furthermore, gynecologic oncologists have expertise in enrolling women with gynecologic cancer in clinical trials without which future advances in cancer care are impossible.

Members of the Delivery Care Team

Members of the proposed team of health care providers would include physicians, advanced practice providers and other key health care providers.

Physicians: While gynecologic oncologists are specially trained to manage women with gynecologic cancer and are often best suited to serve as the team captain, other physician members are critical to providing optimal care for the woman with a suspected or diagnosed gynecologic cancer. While many gynecologic oncologists oversee or provide their own chemotherapy programs, many partner with medical oncologists who have an interest in gynecologic cancer. Radiation oncologists with expertise in these cancers are critical to the treatment of women with endometrial, cervical, vulvar, and vaginal cancers, as well as all women with any gynecologic cancer where radiation may be of palliative benefit. There are instances where medical oncologists or radiation oncologists with special training and expertise in gynecologic cancers may be best suited to be the patient's team captain. In addition, specially trained pathologists, diagnostic and interventional radiologists, and palliative care physicians provide needed expertise to the care of women with gynecologic cancer. Finally, a woman's primary care physician remains a critical member, as he or she can assist in the management of other chronic diseases that continue to be a factor in the woman's overall care.

Advanced practice providers: Advanced practice providers such as nurse practitioners and physician assistants are vital members of the team. They can work directly with gynecologic oncologists and assist in the pre- and post-operative management of women with gynecologic cancer, pain management, long-term follow up of women in remission undergoing active surveillance programs, and provision of information and care regarding ongoing survivorship issues such as long-term toxicities, sexuality and other issues. Advanced practice providers can serve as the first assistant during surgical cases and provide consistent, reliable skills during cancer operations. In addition, they provide critical functions when located within an office or chemotherapy infusion suite. In this setting, they can provide same-day assessments of urgent problems such as fever, pain, dehydration, nausea and vomiting. This service helps reduce patient visits to the emergency room and thus reduces unnecessary hospitalizations. The independent use of advanced practice providers is especially useful in areas where the number of gynecologic oncologists is limited, provided they have access to a gynecologic oncologist.

Other Key Team Members: Several other key team members provide critical input in the proposed team model. Oncology nurses are responsible for the safe infusion of highly toxic chemotherapy drugs. In addition, they provide patient education, toxicity assessment, telephone triage and symptom management. Oncology pharmacists and pharmacologists design patient-specific pharmacotherapy plans to optimize patient outcomes, reduce toxicity and help manage

costs. Other members such as genetic counselors, social workers, physical therapists, psychologists, and lymphedema specialists provide specialized management of myriad other issues.

What cannot be overemphasized is the role that SGO and other key organizations play to ensure the continuing education of gynecologic oncologists and other health care providers dedicated to the care of women with a suspected or diagnosed gynecologic cancer to equip these providers with the skill sets necessary to deliver high quality gynecologic cancer care.

Implementing an Ideal Care Team Model

Gynecologic oncologists should serve (in most instances) as the single point of access for women with a suspected or diagnosed gynecologic cancer.

All women with suspected or diagnosed gynecologic cancers would receive a direct referral to a gynecologic oncologist or specialist with similar expertise. Women with a suspected or diagnosed gynecologic cancer deserve to have their cancer treatment coordinated by an expert in the field at the time of initial diagnosis. The credentials and the level of experience listed above justify the appropriateness of choosing gynecologic oncologists to serve in the capacity of team captain for the woman with a gynecologic cancer. The primary care physician, general obstetrician-gynecologist or other specialists should have appropriate incentives to refer women with a suspected or proven gynecologic cancer directly to a gynecologic oncologist. Appropriate strategies should be developed to facilitate the evaluation of such women who live in rural or other areas underserved by a gynecologic oncologist. The gynecologic oncologist can establish the treatment plan with these physicians either in person (same institution) or electronically (via telemedicine). Monitoring of response to the treatment plan can be achieved at various intervals, or as needed based on new findings or toxicity of treatment. Following completion of primary treatment, the gynecologic oncologist designs a plan of surveillance. Should the woman experience a recurrence of her cancer, the gynecologic oncologist will again coordinate the care plan.

The team captain should coordinate care with other gynecologic cancer health care providers.

Demonstration projects from a variety of integrated health systems demonstrate that care delivered through a primary care PCMH model reduces costs, or prevents increases in costs, primarily through reduced emergency room visits and unnecessary hospitalizations. If a similar model were implemented for gynecologic oncology, then at every decision point the gynecologic oncologist would collaborate with the other health care team members to ensure correct

implementation of the treatment plan. This model would streamline care and reduce costs by minimizing ancillary studies and inappropriate admissions. Linked electronic medical record (EMR) systems and advanced telecommunications would facilitate the coordination of care required for this team-based approach to treat a woman with a complex cancer.

The qualifications of the captain and other members of the care team would be continually monitored.

Metrics should be established to monitor the qualifications of the various members of the team involved in the care of women with suspected or diagnosed gynecologic cancers. Such metrics might include board certification, evidence of continuing education, minimum volume of surgeries, adherence to established evaluation and treatment guidelines, adherence to quality measures, participation in multidisciplinary tumor boards, clinical trial enrollments, and measurement of patient satisfaction.

Resources Needed to Implement the Care Team Model

Workforce needs require assessment and appropriate coordination and enhancements as required.

At a number of tertiary institutions the team members and resources previously described do exist but are usually not well coordinated into a team. For example, lymphedema specialists, gynecologic pathologists and palliative care experts are probably underutilized when considering the overall volume of women with gynecologic cancers. Thus, delivery of care systems that create networks of needed experts in the care of women with a suspected or diagnosed gynecologic cancer need to be implemented.

In other settings, ranging from inner city hospitals to rural areas, such resources are not so readily available. Indeed, formal measures are required to determine the necessary number of gynecologic oncologists and other members of the care team in the short and long term. Modeling work has indicated that, despite advances in the treatment of gynecologic cancers and implementation of prevention strategies such as the human papillomavirus (HPV) vaccine, the total number of gynecologic cancers treated in the United States is likely to grow by up to 30% over the next 40 years.⁸ This has a potential to increase the cancer caseload of each practicing gynecologic oncologist by approximately 20% if the rate of fellowship training positions remains constant.

Physicians alone will not be able to address the growing cancer care needs. New models that incorporate physician assistants, nurse practitioners, and oncology nurses into the oncology

workforce and expansion of the roles of these advanced practice providers will ensure continuous delivery of high quality cancer care. Training programs will need to graduate more advanced practice providers not only to fill the current health care needs, but also to address future cancer care needs. Further study of the training needs for gynecologic oncologists as well as advanced practice providers for the gynecologic cancer care team is vitally important to ensure the success of the proposed model.

The health care system requires realignment of incentives that promote referral of women with gynecologic cancer to our proposed team care model.

Women with a suspected or diagnosed gynecologic cancer deserve to be evaluated and managed by a care team best qualified to do so. Despite studies that demonstrate improved surgical outcomes in women with ovarian cancer when they are managed by a gynecologic oncologist, many women with ovarian cancer are not referred to appropriate specialists. Hospital credentialing and reimbursement policies must be changed to discourage providers that do not have specialty training in gynecologic oncology from providing care to women with gynecologic cancer.

In addition, reimbursement policies need to reward optimization of the care team process. The team captain should be compensated for coordinating the care required for women with gynecologic cancer. Care by ancillary service providers should be appropriately valued and compensated. Such efforts are likely to actually decrease the cost of care as a result of better utilization of health care resources, avoidance of unnecessary diagnostic studies, and reduction in emergency room visits and hospitalizations.

EMR and telecommunication systems need to be further improved to facilitate access and coordination.

EMR and telecommunication systems are vitally important to the proposed team care model. In a tertiary care center, care is more often easily coordinated within a single institution that has common information systems. In other settings, particularly in more remote settings, these resources are more limited.

Regardless of the setting, there is a clear need for strong EMR systems that are easy to access, have common data elements, and allow cross talk between different systems. Such resources would reduce the staff time spent acquiring old medical records, the waste of duplicated laboratory and radiographic services, and the danger of making wrong clinical decisions based on missing and inaccurate information.

Robust telecommunication systems are needed to facilitate care team members' access to specialists in gynecologic oncology, to efficiently link care team members, and to promote adherence to current standards of care. Telemedicine could facilitate access to second opinions, review of imaging studies, review of external pathology, and telementoring from experts in tertiary centers to physicians in remote areas. Combined with efficient EMR systems, telemedicine infrastructure should help address existing disparities in care between rural areas and tertiary care centers and reduce duplication and waste. Incentives need to be in place that reward, rather than hinder, the use of EMR and telemedicine systems.

Demonstration projects and registries need to be funded to further optimize the infrastructure and monitor the effectiveness of the proposed care team model.

SGO proposes a demonstration project be funded to pilot the proposed care delivery model within several different existing care delivery systems. The objective of the demonstration project is to determine whether implementation of an oncology medical home model for gynecologic cancer care will improve key quality indicators and resource utilization in gynecologic cancer care. SGO hypothesizes that the proposed model will favorably impact these parameters and result in higher quality, less costly, and more efficient cancer care. SGO also recommends support for a national registry that could facilitate the evaluation of the previously described objectives and monitor the effectiveness of the proposed delivery model.

Continuing education on alternative health care delivery models should be fostered.

The delivery of high quality gynecologic cancer care is only going to become more complex. Educational programs are needed so gynecologic cancer care team members are kept abreast of developments and innovations in health care delivery systems.

Ultimate Outcome of the Proposed Care Team Delivery Model

Inefficiencies in our current health care system often promote fragmented care of the woman with gynecologic cancer, poor access to the mostly highly skilled health care providers for these women, and waste of valuable health care resources. **The SGO hopes to convert our current system to one that provides each woman diagnosed with a gynecologic cancer with a personal team captain and access to the best possible coordinated care while reducing waste of valuable health care resources.**

IV. Defining High Quality Gynecologic Cancer Care

Weaknesses in Current Quality Systems

- Women with a diagnosed or suspected gynecologic cancer are not provided guideline-based care.
- Women with gynecologic cancer are not uniformly afforded the opportunity to participate in clinical trials.
- There is limited accountability in the current system, and as a result the goal of consistently providing high quality care remains elusive.

Proposed Solutions and Resources Required to Optimize Quality Measures and Improvement

- Create uniform access for women to the best qualified health care providers.
- Better define measurable standards for high quality care specific for women with gynecologic oncology.
- Expand patient access to a robust clinical trials system.
- Develop and test a system that holds providers accountable for delivering higher quality gynecologic cancer care and guideline-based care.
- Enhance outcomes-based research through increased research funding, demonstration projects and registry systems.

Published studies clearly demonstrate that improvements in patient outcomes and cost savings are feasible in surgical-based specialties. For example, the national organ transplant programs have seen significant improvements in quality and outcomes in the past decade. The Organ Procurement and Transplantation Network (OPTN) increased its commitment to quality improvement through development of a quality management team to capture prospective and retrospective data points leading to formal quality standards.^{9,10} In collaboration with the Centers for Medicare and Medicaid Services (CMS), the OPTN has seen improvements throughout the transplant process, including doubling organ placement rates while maintaining national quality and access standards.

The development of quality measures for gynecologic cancers is currently in its infancy. The SGO has several ongoing quality and outcome improvement initiatives with organizations dedicated to health care quality, such as National Surgical Quality Improvement Project (NSQIP), American Cancer Society Commission on Cancer (ACS CoC), American Society of Clinical Oncology's Quality Oncology Practice Initiative (QOPI), and the National Quality Forum (NQF). The SGO is also collaborating with other like-minded professional organizations, including American Congress of Obstetrics and Gynecology (ACOG), American Board of Obstetrics and Gynecology (ABOG), and the American Society of Clinical Oncology (ASCO) to better define, capture, and measure quality in gynecologic cancer care. These quality improvement efforts in gynecologic cancer have already helped improve patient safety, yet so much more needs to be done.

Weaknesses in Current Quality Systems

Women with a diagnosed or suspected gynecologic cancer are not provided guideline-based care.

Less than 50% of women with gynecologic cancer are receiving care, according to guidelines established by the National Comprehensive Cancer Network (NCCN) (Figure 4).^{11,12} These statistics are dramatically improved when specialists with the best gynecologic cancer training and experience are involved in their care. Access to gynecologic oncologists has been addressed in our prior sections regarding the delivery of quality cancer care. Receiving guideline-based care is a strong predictor of oncology outcomes including overall survival.

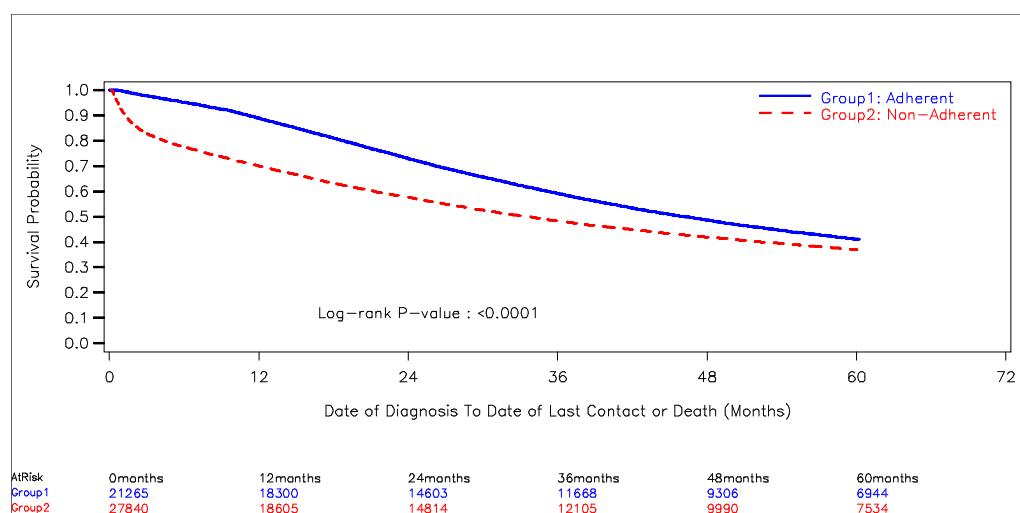


Figure 4. Care adherent with NCCN guidelines for the management of ovarian cancer is associated with a 13-month improved median survival (46.1 vs. 33.4 months).¹¹

Several studies have also shown that deviation from accepted guidelines costs more money.¹³ And after treatment, women with gynecologic cancer are rarely followed according to established protocols, as explained in a 2011 SGO position statement on post-treatment surveillance.¹⁴

Women with gynecologic cancer are not uniformly afforded the opportunity to participate in clinical trials.

New ways are needed to screen for, prevent, and treat gynecologic cancers in order to improve outcomes for women. The Gynecologic Oncology Group (GOG), a National Cancer Institute (NCI)-sponsored cooperative group, has had a 30-year history of success with multidisciplinary clinical trials in improving outcomes for women with gynecologic cancer. Indeed, many of the current “standard-of-care” treatments are based on pivotal GOG trials showing improvement in patient survival of one therapy over another.^{15,16,17,18,19,20} Yet progress is slow, because surprisingly few women with gynecologic cancer (<10%) participate in clinical trials. This may be due to a variety of factors: 1) women may not be advised of their options for clinical trials as their provider may not have them open at their institution, 2) insurance providers may deny for patients to be on clinical trials outside their network, e.g., HMOs, and 3) providers may not offer clinical trials to patients as most have to do so at a revenue loss due to poor reimbursement for the required support. SGO supports both the Institute of Medicine and the Clinical Trials Transformation Initiative in their work to revamp the organization and economics of clinical trials to fix this pernicious problem.

There is limited accountability in the current system, and as a result the goal of consistently providing high quality care remains elusive.

The current efforts to improve quality via NSQIP and other continuous quality improvement efforts have been useful in improving patient safety. New payment systems are being proposed that reward adherence to these guidelines. However, quality improvement systems that provide more granular outcomes data and feedback regarding adherence to evidence based guidelines and complication rates in comparison to acceptable benchmarks are lacking. Information systems poorly capture this data, and despite advancements with electronic medical record systems, outcomes analysis remains very expensive and labor intensive.

Proposed Solutions and Resources Required to Optimize Quality Measures and Improvement

New strategies are needed to 1) better define and measure the quality of care provided to women with gynecologic cancer, and 2) hold those responsible for this care to high quality

standards. The following sections outline steps to take for improved quality of gynecologic cancer care.

Uniform access to the health care providers best qualified to care for women with gynecologic cancer.

The best way to ensure that the highest quality of care is delivered in the most efficient way is to ensure early access to providers with expertise in the management of gynecologic cancers. The importance of this is intuitive; yet, a substantial number of women with gynecologic cancer receive care by providers who are not well-trained or experienced in gynecologic oncology. Importantly, studies confirm that guideline-based care, most often delivered by specialists such as gynecologic oncologists, leads to improved outcomes.^{3,4,5,6} Thus, in-person or virtual consultations with certified gynecologic oncologists would ensure that women with gynecologic cancer receive standard of care therapy, while also avoiding redundancies and lowering costs. We have previously proposed solutions to the weaknesses in the current delivery system. These solutions would not only improve access but ultimately lead to significant improvements in patient outcomes by providing higher quality cancer care.

Measurable standards for high quality care for women diagnosed with gynecologic cancer must be better defined.

There are evidence-based guidelines for the management of gynecologic cancer, such as those developed by the NCCN that are currently widely available but often not followed. Improving provider adherence to these guidelines for management would be a start in defining high quality care. Though the ACS-sponsored prospective surgical program NSQIP and the ASCO QOPI program for oncology are clearly steps in the right direction towards improving the quality of cancer care, the CMS program—Physician Quality and Reporting System (PQRS)—is an inadequate system for driving high quality care for women with complex cancers. The currently tracked measures are too basic and non-specific to provide meaningful markers of quality gynecologic cancer care. There remains a need to measure more granular metrics if we are to make true progress towards optimal quality of care. For gynecologic cancers this would include cost, surgical and perioperative complications and morbidity, toxicity associated with non-surgical treatments, patient satisfaction, and survival. Similar metrics are available in the transplant surgical fields and can be adapted to our proposal. Facility, process and outcome measures for women with gynecologic malignancy are summarized below (Proposed Quality Measures for Women with Gynecologic Malignancies). The SGO would propose to continue to work closely with other national oncology

and surgical specialty groups in developing comprehensive meaningful metrics in the context of gynecologic oncology that appropriately capture quality care for our patients.

Figure 5. Proposed Quality Measures for Women with Gynecologic Malignancies

<i>Facility Measures</i>	<i>Process Measures</i>	<i>Outcome Measures</i>
Complex cases appropriately referred to high-volume specialty provider (advanced ovarian cancer)	Adherence to standardized treatment guidelines, e.g., NCCN	All risk adjusted for patient and disease specific situations
Infrastructure (ICU, multidisciplinary team, palliative care, tumor board, clinical trials)	Proportion of appropriate surgical treatment (staging, cytoreduction)	Short-term (perioperative 30-day outcomes), reflective of primary surgical risks/outcomes
Oncologic outcomes (survival)	Appropriate chemotherapy treatment	Long-term oncologic outcomes
Patient satisfaction	Appropriate surveillance	Patient-reported quality of life.
Participation in Quality Outcomes Registry, e.g., NSQIP, NCDB)	Use of validated clinical care plans	

A robust clinical trials system for women with gynecologic cancer must be expanded.

For real progress to be made against gynecologic cancers, there needs to be a system that expands the number of clinical trials for women with gynecologic cancer and embeds clinical trials into day-to-day clinical practice. Doing this will answer important questions to improve the care of future cancer patients more rapidly. In addition, the quality of care provided to women is improved by more robust data from these clinical trials strengthening guideline-based therapy with less use of costly and minimally effective treatments.

A system that holds providers accountable for delivering higher quality gynecologic cancer care needs to be developed and tested.

Currently there are few incentives to ensure that women with gynecologic cancer receive best evidence-driven care. Providers are poorly trained in running quality improvement programs and there are inadequate information systems in place to monitor quality to the degree needed. To

address these weaknesses there needs to be education on quality embedded in the training of specialists in gynecologic cancer. Quality improvement education efforts can be better coordinated among the boarding entity of our specialty (ABOG), our professional society (SGO), along with continued efforts with our partner societies to reach the non-specialists caring for these women (ACOG, ASCO, the American Society for Radiation Oncology and, American College of Surgeons).

Improvements in information systems are necessary so that electronic medical records can be robustly queried for quality information for each provider or can directly deposit practice information into quality databases that can be queried for this quality information. The broad measurement categories previously discussed (facility, process, outcomes) are all amenable to measuring quality. A unified patient registry to track outcomes, allow risk-adjustment, demonstrate quality, and drive quality improvement should be supported with appropriate incentives for the users and payers. Payment systems should support the collection of these metrics.

Participation in programs to measure process and outcomes may improve care for surgical and cancer patients. Such information should be continuously provided to the gynecologic cancer care team and corrective actions implemented to correct deficiencies. Finally, providers must be held accountable for adhering to standards of care and following clinical guidelines. Payment should be penalized when care is inappropriate.

Outcomes-based research should be enhanced with increased research funding, demonstration projects and registry systems.

There is a need for enhanced outcomes based research in gynecologic oncology. Funding from the NCI, Clinical and Translational Science Institute (CTSI), Patient Centered Outcomes Research Institute (PCORI), Department of Defense (DOD), Centers for Disease Control and Prevention (CDC), ASCO and other sources can be used to support this effort.

Novel oncology care models that focus on improving the quality of gynecologic cancer care should be tested through pilot programs. Pilot programs must be enacted and significantly tested prior to national implementation. We recognize that patient-centered Medical Homes have real potential to provide savings to both payers and patients. Registries should be implemented to support these research and modeling efforts. For example, a first step can be a system that promotes practice standards that are similar across all settings with a NSQIP type national registry that has a real time feedback loop for continuous improvement. Compensation policies that foster the provision of only the highest quality of care need to be implemented. The SGO can facilitate

the necessary partnerships between providers and these new programs to improve care for women with gynecologic cancers.

What will be the Ultimate Outcome of this Proposed Quality Improvement System?

The current system for measuring and implementing real time quality improvement is in its infancy. **The strategy we propose lays the foundation for directing women with gynecologic cancer to providers dedicated to providing guideline-based therapies, for enhancing efforts to better measure quality outcomes, and to incentivize providers to use this information for continuous and real-time improvement in gynecologic cancer care.**

V. Payment Systems for Delivery of High Quality Gynecologic Cancer Care

Weaknesses in Current Payment System

- Cumbersome and not sustainable
- Promotes disparities in gynecologic cancer care
- Does not reward high quality care

Proposed Solutions to Optimize Payment Systems

- Develop and test a diagnosis-based episode of care reimbursement system.
- Develop and test a diagnostic episode bundled payment system with an incentive for a team captain.
- Develop and test a bundled approach with no team captain.
- Develop and test a diagnosis-based episode bundled payments as a modified capitation payment system.
- Provide incentives for hospitals to become centers of excellence in gynecologic oncology.
- Provide fair compensation for complicated benign gynecology and obstetric patients.

Resources Needed to Facilitate a Demonstration Project Followed by Implementation of New Payment Systems

- Develop new diagnosis-based episode of care categories and modifying factors.
- Measure the true costs associated with delivery of high quality gynecologic cancer care.
- Create demonstration projects to evaluate new payment systems.
- Support cost-effectiveness research in gynecologic cancer.

The current payment system for health care is fraught with problems. **The reimbursement system as currently designed does not emphasize value, does promote over-utilization of valuable health care resources, and is associated with excessive costs and waste.** The fact that many women in the United States do receive good-to-excellent care is an accidental result of the world's largest economy spending close to 20% of its GDP on health care.

Weaknesses in Current Payment Systems

The current reimbursement system for gynecologic cancer care is cumbersome and not sustainable.

The current system of reimbursement dates to 1992 with the creation of the Resource-based Relative Value System (RBRVS). This system created an elaborate coding scheme that came to include two major components: Current Procedural Terminology (CPT) for classification of medical services and procedures and ICD (International Statistical Classification of Disease) for linkage with the patient's diagnosis. It has required massive amounts of paperwork from physician offices to document and appropriately file charges. As a result, the typical physician now requires two to three additional office personnel to handle billing and collections. This adds to inefficiencies and cost without providing any benefit for patients.

Figure 6. Recent History of Physician Payment

1989 – Passage of the Resource-based Relative Value Scale as part of the Omnibus Budget Reconciliation Act (OBRA); AMA and most other specialty groups had opposed this, deeming it “Expenditure Targets.”

1992 – OBRA was implemented.

1992-1997 – Spending and performance were generally consistent with the parameters of the system.

1997 – Sustainable Growth Rate (SGR), which is tied to the Gross Domestic Product, became law as part of the Balanced Budget Act.

2002 – First SGR payment reduction of 4.8%

2003-2012 – Congress passed SGR fixes, which were freezes or small increases. There was an overall growth rate of 8% vs. a market basket increase of 22% for physician services from 2000-2010.

2010 – Part B drug spending was taken out of the SGR administratively.

2010 – Affordable Care Act was enacted.

2012 – Medicare Payment Advisory Commission recommended repeal of SGR and initiation of payment policies that shift providers away from fee-for-service and toward payment policies that reward improvements in quality, efficiency and care coordination, particularly for chronic conditions.

2013 – Again facing at SGR cut of 26.5%, Congress needs to halt these cuts in the 2012 Lame Duck session.

This system has undergone multiple modifications since its implementation in 1992. But true solutions for improvement remain elusive. Charges and costs have continuously increased over the years and all the major stakeholders know our current reimbursement system is financially unsustainable.

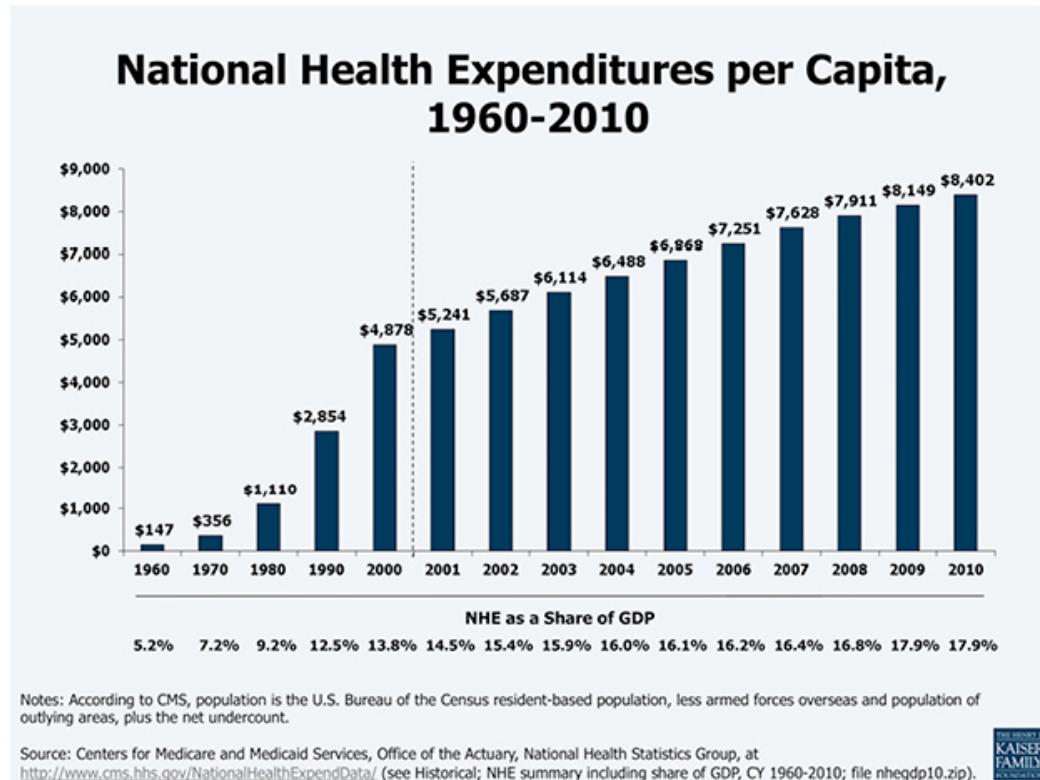


Figure 7. National health expenditures per capita, 1960-2010

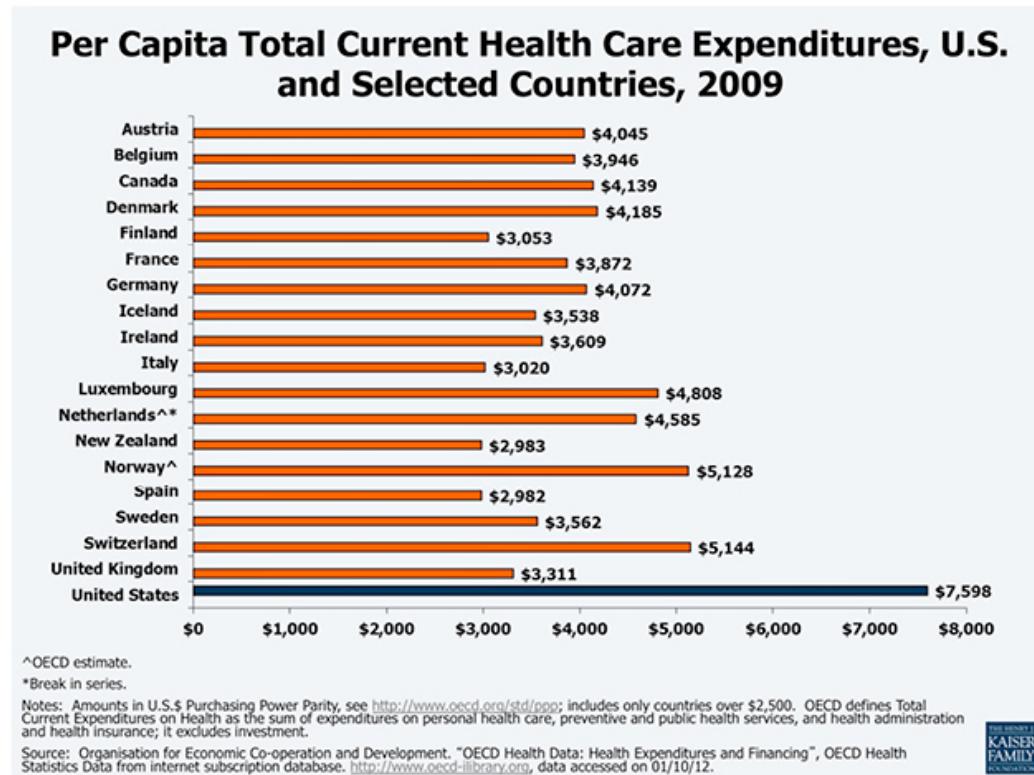


Figure 8. Per capita total health care expenditures, U.S. and selected countries, 2009

The current reimbursement system promotes disparities in gynecologic cancer care.

The existing system has also created significant inequities in the care provided to women in America. Uninsured or underinsured women have much different experiences in the health care system than insured women. Emergency care may be accessible at a taxpayer supported safety net hospital. But elective and preventive care (also known to reduce the need for emergent care) is often not available to poor and uninsured women.²¹ This disparity has a perverse impact on women's health care. For example, Pap testing as a screen has been well established as dramatically reducing cervical cancer rates when used according to established guidelines as it will diagnose pre-cancerous changes in the cervix. However, the women at greatest risk for developing cervical cancer are poor ethnic minorities. Ironically, these are the women who have the least access to Pap test screening due to no insurance or access to preventive care. As a result, these women account for the vast majority of U.S. cervical cancer cases and deaths. The cost of caring for these unfortunate women is higher and outcomes are worse. Meanwhile, well insured affluent women in America continue to receive unnecessary Pap smears in violation of well-established clinical guidelines, leading to significant increases in costs.

The current payment system does not reward high quality care.

The current system provides no incentive to ensure that women with gynecologic cancer are provided the highest quality, well-coordinated care. For instance, there is no difference in compensation when care is provided by specialists with the best training and most experience in gynecologic cancer in comparison to when that care is provided by those who do not have specialized training in gynecologic cancer. There is also limited reimbursement for coordination of care, adherence to management guidelines, meeting benchmarks on meaningful quality parameters, and achieving good patient satisfaction. The costs borne by providers and medical centers striving for quality improvement are not adequately covered by the current payment system. To a large extent, progress in the last decade in quality improvement projects has been achieved by voluntary efforts of health care leaders backed by financial support from philanthropists. Any further quality improvements will be unachievable with the current reimbursement model.

Proposed Solutions to Optimize Payment Systems

Various reforms suggested as a means of changing physician payment are listed in the Appendix. SGO proposes that efforts focus on evaluating the following reimbursement systems as a means to address weaknesses in the current system for compensating the care provided to women with gynecologic cancer.

Develop and test a diagnosis-based episode of care reimbursement system

Payment would be based on each diagnostic episode of the woman's illness, rather than on specific procedures. This type of system could be adapted to virtually all sites of service, physician practice types, and patients. It could also be used to reward quality care and encourage appropriate referrals to subspecialists. SGO proposes that reimbursement be calculated as a function of the specific point in the disease course, with weighted percentages based on standard practice patterns for resource use at these episodes in a patient's clinical history.

This approach makes sense because most gynecologic cancers have relatively predictable patterns of diagnosis, initial treatment, surveillance, and if needed, management of recurrence. Some, like endometrial cancer, have relatively short but intense periods of care. In most instances, women with endometrial cancers are diagnosed by their primary obstetrician gynecologists but sometimes directly referred by their primary care providers to gynecologic oncologists. The majority of the patients do require surgical treatment upfront. Gynecologic oncologists are trained to perform the appropriate extent of surgery including hysterectomy and comprehensive staging properly

tailored to the type of tumor and patients' comorbidities. The initial proper evaluation and treatment allows tailoring postoperative adjuvant therapies if necessary and deemed appropriate to be implemented. Following this intense period of care, the majority of patients can be in surveillance and approximately 15-20% of patients do require additional treatments for recurrent disease. The payments for the appropriate care upfront will be weighed accordingly and adjusted to be less in the surveillance interval. This approach is likely to result in less expenditure due to reduced use of adjuvant treatments and more appropriate selection process of specific treatments such as observation and surveillance versus chemotherapy and/or radiation therapy.

Other cancers, like ovarian cancer, have extended clinical histories spanning years to decades. A typical ovarian cancer patient goes through an initial 6 months of intense and expensive care including her initial diagnosis, followed by radical surgery, and then chemotherapy. Afterwards she will have low intensity episodes of observation until she suffers a recurrence – at which time a new diagnosis-based episode of care begins. At the time of recurrence she may or may not need additional surgery, but will almost certainly need more chemotherapy. Some women will have several cycles of remission/relapse/remission. Eventually, most women with advanced ovarian cancer will succumb to their disease, so the final diagnosis-based episode of care will be terminal care. Of course some women with ovarian cancer, especially if diagnosed with early stage disease, will be cured and never go beyond post-treatment observation. Each of these episodes in the care a woman receives would be "weighted" based on complexity and expense, with reimbursement for the care provided during that episode also weighted proportionally. The total amount of money spent to care for a woman with ovarian cancer could then be better allocated to cover her expenses across the continuum of care she will need from diagnosis to terminal care. The following diagram illustrates how diagnosis-based episodes of care could be applied to a complex and chronic cancer like ovarian cancer).

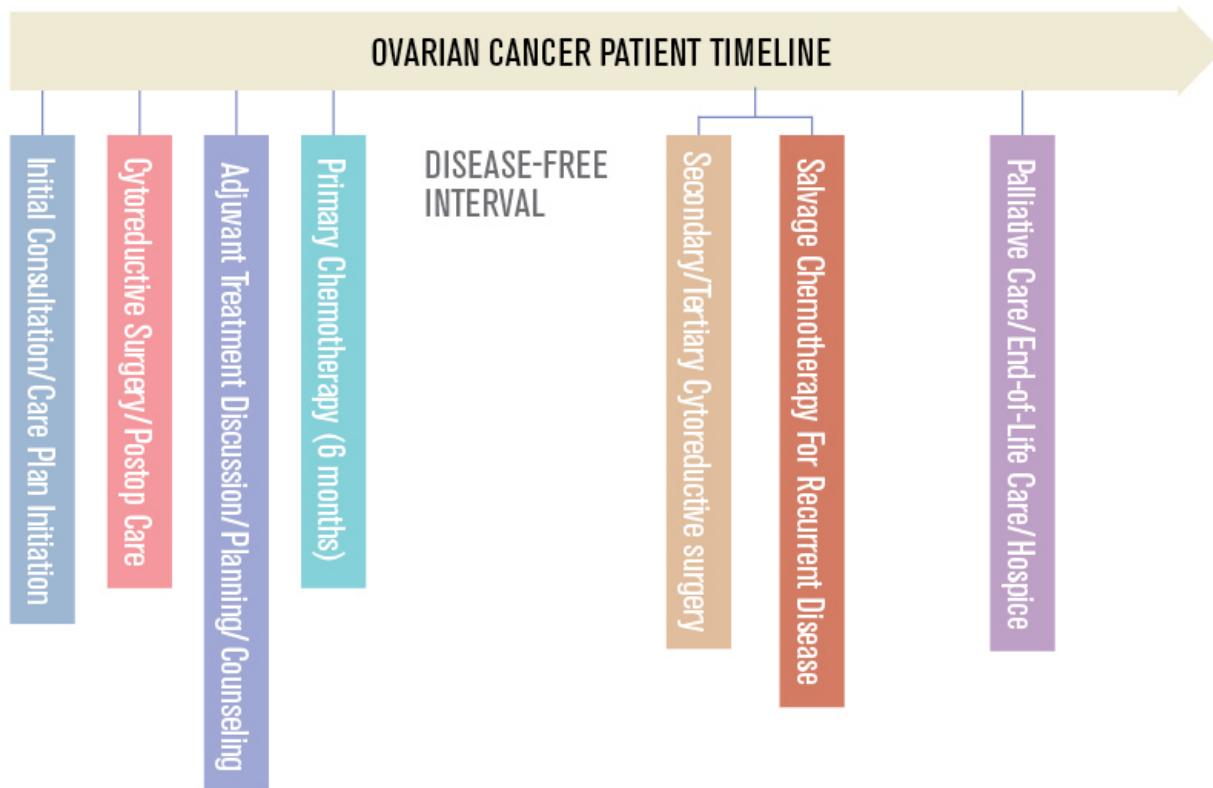


Figure 9. Diagnosis-based episodes of care for an ovarian cancer patient

The current ICD codes could be used as a starting point for defining each of the diagnosis-based episodes. For example, the broad diagnosis of “ovarian cancer” (CPT 183.0) would be divided into the specific “episodes” as defined below:

CPT 183.01 - initial 6 months, which includes primary surgery and chemotherapy based on NCCN or other guidelines.

CPT 183.02 – the disease-free interval (observation)

CPT 183.03 - recurrent disease, including chemotherapy and possibly surgery

CPT 183.04 - palliative and/or end-of-life care.

Each episode would be weighted based on the percentage of the estimated total work required for an average woman with ovarian cancer. Medicare and other third-party payer data bases can be studied to yield very accurate financial weights between these diagnosis-based episodes. The total amount spent on women with ovarian cancer over the course of their disease would also be measured. The total amount allocated to caring for a case of ovarian cancer would be updated on an annual basis to reflect increases in the Medical Economic Index (MEI) or some other economic

benchmark. All this information would be used to create a reimbursement schedule to fairly compensate each diagnosis-based episode of care provided to a woman with ovarian cancer.

Based on our familiarity with managing women with ovarian cancer, we can make some initial estimates for how the different diagnosis-related episodes would be weighted for an ovarian cancer patient. Keeping in mind that these figures are for purpose of illustration, we estimate the following:

- 40% for 183.01 (initial surgery and chemotherapy);
- 10% for 183.02 (low-intensity but chronic surveillance)
- 30% for 183.03 (active management of one recurrence)
- 20% for 183.04 (good quality palliative and terminal care)

Gathering the data and then creating a new diagnosis-based episode reimbursement model will be a daunting task – but no more difficult than creation of the RBRVS system back in 1989. Indeed, we think that the only way to break away from a less-than-optimal system that rewards quantity of care over quality of care is to move to some kind of episode-of-care system for reimbursement.

Develop and test a diagnostic episode bundled payment system with an incentive for a team captain.

Delivery of high quality gynecologic cancer care would be based on a team composed of health care providers as we have previously described. A bundled payment system would dispense a coordination fee for the team captain, distribute a percentage of the bundled payments based upon involvement of team members in the episode of care, and adjust payments based upon complexity of care and co-morbidities. A bundled payment system can be structured to incentivize referral of women with gynecologic cancer to specialists with the best training and experience in these diseases. For instance, if the initial surgery for an ovarian cancer is done incorrectly, then payment to the responsible surgeon can be reduced or even withheld by the team captain. How much of the allocated funds are dispersed for any diagnosis-based episode can also be linked to adherence to evidence based guidelines, achieving quality outcome measures, and meeting patient satisfaction benchmarks.

CMS would pay the coordination fee to the gynecologic oncology practices for their team captain work to support these enhanced, coordinated services on behalf of Medicare fee-for-service beneficiaries. Simultaneously, participating commercial, state, and other federal insurance plans

should also offer enhanced payment to gynecologic oncology practices that are designed to provide high-quality care on behalf of their insured beneficiaries.

Develop and test a bundled approach with no team captain.

Under this type of system, the physicians would still bill for each diagnostic episode on a per-patient basis. However, there would not be a coordinated care team, and therefore no concept of a team captain. Each individual specialist would bill based on a specific diagnostic episode. This system would be feasible in settings that lack the components needed for a coordinated care team. This may include smaller or more isolated communities. This system would retain many of the positive factors of the system described above, including incentives for quality, removing incentives for unnecessary procedures, and encouraging the appropriate use of gynecologic oncologists by limiting payments for specific diagnoses to specific specialties.

Develop and test a diagnosis-based episode bundled payments approach as a modified capitation payment system.

A gynecologic oncologist would be paid a monthly sum based on a historical number of patients cared for by this physician or practice and based on a to-be-determined calculation so that reimbursement would not decline. Medicare and the provider would then enter into a risk sharing process in which future payments would be based on the number of patients seen in a year with a risk window of +/- 5 to 10%. Patients with whom the gynecologic oncologist interacted in any way, i.e., through office visits, surgeries, consultations, or coordination duties as outlined previously, would be factored into reimbursement. Risk sharing could be considered, related to the total cost of the patient's care, with shared savings distributed to the provider. This type of system has been successfully tested in the private sector by a gynecologic oncology practice for all services except drug costs.

Provide incentives for hospitals to become centers of excellence in gynecologic oncology.

The proposed payment systems emphasize quality of care through referral to specialists with the best training and most experience in gynecologic cancer, coordination of care in higher volume centers, adherence to treatment and surveillance guidelines, meeting benchmarks on more meaningful quality outcome parameters, and achieving acceptable patient satisfaction. Hospital reimbursement for services should be linked to meeting similar minimum standards and be penalized with lower reimbursements in the setting of elective care of women with gynecologic

cancer if they fail to meet these standards. This type of system has already been successfully tested in organ transplant and bariatric surgery and could conceivably be applied to women's cancer care.

Provide fair compensation for complicated benign gynecology and obstetric patients.

Gynecologic oncologists often provide surgical care to women with complex benign gynecologic conditions, significant medical comorbidities, or obstetrical emergencies, as illustrated by the examples below.

Figure 10. Complex Pelvic Surgical Conditions

Unusual diagnosis requiring complex medical or surgical care	Surgical procedures or services provided by a gynecologic oncologist
Severe intra-abdominal and pelvic adhesions	Extensive adhesiolysis, including ability to repair enterotomies, cystotomies, and ureteral injuries
Extensive endometriosis	Radical resection of endometriosis, using comparable techniques for ovarian cancer cytoreduction
Large pelvic masses, typically with ueteral obstruction	Removal of mass requiring retroperitoneal dissection and ureterolysis
Medical comorbidities, i.e., obesity, cardiopulmonary compromise, diabetes	Employ minimally invasive techniques, including robotic surgery, to safely operate on these high risk patients
Lower genital tract dysplasia (vulvar, vaginal and cervical)	Complex colposcopic assessment with CO ₂ laser surgery
Gestational trophoblastic disease ("molar pregnancy")	Perform initial dilation and evacuation (D&E) followed by chemotherapy when needed for high risk patients
Obstetrical emergencies, including life-threatening hemorrhage	Gravid hysterectomy, coordination of postoperative intensive care

Few other primary or specialty physicians have the surgical training or experience to handle the complex surgical and perioperative problems encountered in these settings. Involvement of gynecologic oncologists early in the care of these women leads to improved patient outcomes and decreased overall costs. No provisions are made in the current payment systems to fairly compensate the unique contributions gynecologic oncologists make in these settings. Any new payment system needs to address patient severity by attaching a scale of difficulty and morbidity to

each patient. There should also be a payment differential for appropriate referral of these patients, both for the physician who sends the patient and the physician who receives the patient.

This proposal would replace the old “-22 Modifier” policy, in which a surgeon adds a -22 modifier to the CPT code to indicate a case was more difficult than average. Currently, there is wide spread dissatisfaction with the “-22 Modifier” approach. Physicians complain the modifier is routinely rejected by third-party payers, and the insurance companies counter with accusations of inappropriate use of the modifier by surgeons for routine cases.

Resources Needed to Facilitate a Demonstration Project Followed by Implementation of New Payment Systems

New diagnosis-based episode of care categories and modifying factors need to be developed.

The definitions of each diagnosis-based episode will need to be established for each gynecologic cancer. Existing evidence based guidelines such as those published by the NCCN or more rigorous guidelines under development by the SGO should be utilized to define these episodes. Modifying factors for payment should be developed based on issues that increase the degree of difficulty for managing a patient. This is important so there is an incentive and not a disincentive to care for woman with a complicated condition.

The true costs associated with delivery of high quality gynecologic cancer care need to be measured.

There is a need to understand the current cost of care provided to women with gynecologic cancers. This would be achieved through evaluation of current Medicare and private insurance databases. Looking ahead, the cost of providing comprehensive gynecologic cancer care that is based upon adherence to the quality parameters we have previously discussed is unclear. Registries that prospectively evaluate these costs are critical. These data would provide clarity to the investment needed to ensure delivery of high quality gynecologic cancer care, and in turn track the cost savings when a new reimbursement system is in place.

Demonstration projects are needed to evaluate new payment systems.

There is a clear need to assess alternative payment systems. SGO proposes a bundled payment system be evaluated in gynecologic cancer that would support the previously described care team delivery. An example of such a proposal would be the Gynecologic Oncology Care Quality Improvement (GOCQI). This program would evaluate how *reporting of quality metrics* by participating

organizations improve care; how the *adoption and application of clinical, evidence-based treatment protocols* lead to better patient outcomes; and how *adherence to both quality reporting and clinical protocols* lowers Medicare expenditures by reducing unnecessary utilization of services, as measured against expenditures for beneficiaries with cervical, endometrial and ovarian cancer.

Cost-effectiveness research in gynecologic cancer needs to be supported.

Identifying the most cost-effective strategies for managing gynecologic cancer care must be a priority. For example, funding research that clarifies the financial impact of neoadjuvant chemotherapy in women with ovarian cancer or the role of surgical staging in endometrial cancer are two priorities. Future clinical trials and projects promoting quality improvement should also measure financial outcomes. When a clinical standard of care is already well established, research to figure out how to provide that care in the most cost-effective way needs to be funded. Members of the SGO are eager to help this field of research move forward.

What will be the ultimate outcome of this proposed quality improvement system?

New payment systems must facilitate transition from fee-for-service payments that reward quantity to a system that rewards quality. **Development of a diagnosis-based episode system that fairly compensates quality care delivered by a health care team should be the highest priority.**

VI. Summary

Women with gynecologic cancer deserve to be provided only the highest quality and most cost-effective care by those practitioners with the best training and experience. But, significant barriers to providing such care to women with gynecologic cancer exist in the current health care system. **The solutions proposed by the SGO in this document provide a roadmap towards improving the quality of gynecologic cancer care, while reducing costs associated with unnecessary testing and inappropriate therapies.** Many of the resources required to implement the proposed solutions are readily available, and with good leadership significant improvements in the care provided to women with gynecologic cancer can be made with little delay. The SGO is committed to working with policy leaders to make the changes needed in our health care system.

Together we can achieve meaningful reforms.

Together we can rescue an economically unsustainable medical system.

Together we can improve health care for women with gynecologic cancer.

Our patients deserve no less.

References

1. American Cancer Society. *Cancer Facts & Figures 2010*. Atlanta, GA. 2009. Last Medical Review: 05/20/2009. Last Revised: 05/20/2009. Available at <http://www.cancer.org/Research/CancerFactsFigures/CancerFactsFigures/cancer-facts-and-figures-2010>. Accessed Nov. 19, 2012.
2. Siegel R, Naishadham D, Jemal A. Cancer statistics, 2012. *CA*. 2012;62:10–29.
3. Goff BA, Matthews BJ, Wynn M, Muntz HG, Lishner DM, Baldwin LM. Ovarian cancer: patterns of surgical care across the United States. *Gynecol Oncol*. 2006;Nov;103(2):383-90.
4. Earle CC, Schrag D, Neville BA, et al. Effect of surgeon specialty on processes of care and outcomes for ovarian cancer patients. *J Natl Cancer Inst*. 2006;Feb. 1;98(3):172-80.
5. Chan JK, Kapp DS, Shin JY, et al. Influence of the gynecologic oncologist on the survival of ovarian cancer patients. *Obstet Gynecol*. 2007;Jun;109(6):1342-50.
6. Roland PY, Kelly FJ, Kulwicki CY, Blitzer P, Curcio M, Orr JW Jr. The benefits of a gynecologic oncologist: a pattern of care study for endometrial cancer treatment. *Gynecol Oncol*. 2004;Apr;93(1):125-30.
7. Chan JK, Sherman AE, Kapp DS, et al. Influence of gynecologic oncologists on the survival of patients with endometrial cancer. *Clin Oncol*. 2011;Mar 1;29(7):832-8.
8. Smith BD, Smith, GL, Hurria A, et al. Future of Cancer Incidence in the United States: Burdens Upon an Aging, Changing Nation. *JCO*. 2009;Jun 10;27(17):2758-2765.
9. Lamb KE, Lodhi S, Meier-Kriesche HU. Long-term renal allograft survival in the United States: a critical reappraisal. *AM J Transplant*. 2011;Mar;11(3):450-62.
10. Lodhi SA, Lamb KE, Meier-Kriesche HU. Solid organ allograft survival improvement in the United States: the long-term does not mirror the dramatic short-term success. *Am J Transplant*. 2011;Jun;11(6):1226-35.
11. Powell, MA. Adherence with National Comprehensive Cancer Network (NCCN) guidelines associated with improved survival in ovarian cancer patients: a study of 144,449 patients from the National Cancer Data Base: a project from the Society of Gynecologic Oncologists (SGO) Quality and Outcomes Committee. Abstract 1133. Presented March 8, 2011, at the Society of Gynecologic Oncologists 41st Annual Meeting on Women's Cancer in Orlando, FL.
12. Thrall MM, Gray HJ, Symons RG, et al. Trends in treatment of advanced epithelial ovarian cancer in the Medicare population. *Gynecol Oncol*. 2011;Jul;122(1):100-6. Epub 2011 Apr 15.

13. Perrier L, Buja A, Mastrangelo G, et al. Clinicians' adherence versus non adherence to practice guidelines in the management of patients with sarcoma: a cost-effectiveness assessment in two European regions. *BMC Health Services Research*. 2012;Mar;12(82).
14. Salani R, Backes FJ, Fung MF, et al. Posttreatment surveillance and diagnosis of recurrence in women with gynecologic malignancies: Society of Gynecologic Oncologists recommendations. *Am J Obstet Gynecol*. 2011;Jun;204(6):466-78.
15. McGuire WP, Hoskins WJ, Brady MF, et al. Cyclophosphamide and cisplatin compared with paclitaxel and cisplatin in patients with stage III and stage IV ovarian cancer. *N Engl J Med*. 1996;Jan 4;334(1):1-6.
16. Ozols RF, Bundy BN, Greer BE, et al. Phase III trial of carboplatin and paclitaxel compared with cisplatin and paclitaxel in patients with optimally resected stage III ovarian cancer: a Gynecologic Oncology Group study. *J Clin Oncol*. 2003;Sep 1;21(17):3194-200. Epub 2003;Jul 14.
17. Armstrong DK, Bundy B, Wenzel L, et al. Intraperitoneal cisplatin and paclitaxel in ovarian cancer. *N Engl J Med*. 2006;Jan 5;354(1):34-43.
18. Walker JL, Piedmonte MR, Spiroto NM, et al. Recurrence and survival after random assignment to laparoscopy versus laparotomy for comprehensive surgical staging of uterine cancer: Gynecologic Oncology Group LAP2 Study. *J Clin Oncol*. 2012 Mar 1;30(7):695-700. Epub 2012 Jan 30. Erratum in *J Clin Oncol*. 2012;May 1;30(13):1570.
19. Randall ME, Filiaci VL, Muss H, et al. Randomized phase III trial of whole-abdominal irradiation versus doxorubicin and cisplatin chemotherapy in advanced endometrial carcinoma: a Gynecologic Oncology Group Study. *J Clin Oncol*. 2006;Jan 1;24(1):36-44. Epub 2005 Dec 5.
20. Rose PG, Bundy BN, Watkins EB, et al. Concurrent cisplatin-based radiotherapy and chemotherapy for locally advanced cervical cancer. *N Engl J Med*. 1999;Apr 15;340(15):1144-53. Erratum in *N Engl J Med*. 1999;Aug 26;341(9):708.
21. Bristow RE, Zahurak ML, Ibeau OA. Racial disparities in ovarian cancer surgical care: a population-based analysis. *Gynecol Oncol*. 2011;May 1;121(2):364-8. Epub 2011 Feb 1.

Appendix

Possible Methods for Physician Payment

Paying more for certain services

- Payments for currently unreimbursed services such as care coordination
- Higher payments for currently reimbursed services

Paying based on quality of services

- Pay for performance
- Non-payment for services required to treat complications, infections, etc.
- Non-payment for services that fail to meet minimum quality standards
- Quality-based tiers

Combining separate services into a single payment

- Case management payments
- Case rates/payments for episodes of care
- Practice capitation

Making payment dependent on the amount and cost of services delivered by other physician or providers

- Resource use-based pay-for-performance
- Shared savings/gain-sharing
- Bundling multiple providers into a single episode payment
- Comprehensive care payment/global payment/capitation
- Virtual bundling
- Resource use-based tiers

Paying to support specific provider structures, systems and locations

- Paying physicians more for locating to geographic areas with shortage of physicians
- Paying physicians more if they use health information technology
- Paying to help physicians create care coordination systems
- Paying a fixed amount directly to medical groups for each enrolled patient for services over a span of time, such as per month, using a population-based model; use report cards to measure individual physician performance

Different Payment Models for Different Types of Patients

- Patient-centered medical homes/Accountable Care Organizations/Medical Neighborhood
- Comprehensive care or global payments with a spending target
- Episodes of care
- Fee-for-service
- Bundle all services that a physician provides for treatment of a chronic disease
- Bundle physician and hospital payments

Practice Summit Participants

Practice Summit Chair

Ronald D. Alvarez, MD
2012-2013 President
Society of Gynecologic Oncology

Working Group Coordinators

Heidi J. Gray, MD
Patrick F. Timmins III, MD

Working Groups

Delivering High Quality Gynecologic Cancer Care

Randall K. Gibb, MD (Co-chair)
Mitchell Edelson, MD (Co-chair)
Jeffrey M. Fowler, MD
Laura Havrilesky, MD
Dayna L. McCauley, PharmD, BCOP
John D. Nash, MD
Jamal Rahaman, MD
Joanne K. Rash, PA-C
Kerry Rodabaugh, MD

Defining High Quality Gynecologic Cancer Care

Matthew A. Powell, MD (Co-chair)
Robert E. Bristow, MD (Co-chair)
John V. Brown, MD
Devansu Tewari, MD
Melissa M. Thrall, MD
William A. Cliby, MD
David E. Cohn, MD
Paula Anastasia, MN, RN, AOCN

Payment Systems Supporting Delivery of High Quality Gynecologic Cancer Care

William R. Robinson III, MD (Co-chair)
Mark S. Shahin, MD (Co-chair)
Leigh A. Cantrell, MD

Noelle Gillette Cloven, MD
Michael A. Gold, MD
Joanie Mayer Hope, MD
Howard Muntz, MD
Joel I. Sorosk, MD

Policy, Collaboration and Advocacy

Heidi J. Gray, MD (Co-chair)
Patrick F. Timmins III, MD (Co-chair)
Linda Duska, MD
John C. Elkas, MD, JD
Michael M. Frumovitz, MD, MPH
Elizabeth Jewell, MD
Monique A. Spillman, MD, PhD

Ex-officio Practice Summit Participant

R. Wendel Naumann, MD
Chair
SGO Education Committee