Georgia ON MY MIND

One State's Unified, Comprehensive Approach to Cancer Treatment

by Rhonda Mealor; Kate Canterbury, MPA; Nancy Paris, MS, FACHE; Susan Irby, MSHS; and Nancy Johnson, MSM

Georgians of all backgrounds have experienced the devastating impact of cancer. Nearly 15,000 Georgians were expected to die from the disease in 2006, and each day more than 100 new cases are diagnosed. Similar to other states, four cancer types account for 53 percent of cancer deaths reported in Georgia: lung, colorectal, breast, and prostate. Among Georgian males, however, mortality rates from lung and prostate cancer are approximately 20 percent higher than the national average.[1]

The total annual cost associated with cancer care in the state is approximately $4.6 billion. Much of this cost is associated with direct medical care, but indirect costs due to lost productivity from illness and premature death are also significant.[1]

Today, Georgia is proud to have developed a unified approach to fighting this devastating disease. Teamwork has been a core component of this effort. Georgia cancer quality initiatives range from the recruitment of cancer scholars, to a program for measuring and monitoring the quality of care across the state, to a statewide clinical trials program. Acting as the adhesive to bind these multiple initiatives together is the Georgia Cancer Coalition.

The Georgia Cancer Coalition

In 2001 the Georgia Cancer Coalition (GCC) was founded by Hamilton Jordan, four-time cancer survivor and former Chief of Staff for President Jimmy Carter. Jordan wrote the GCC's original strategic plan, which outlined a statewide cancer initiative.

At about the same time, the State of Georgia was fighting to counteract a general perception that "better cancer care was available elsewhere." Each neighboring state boasted at least one NCI-designated Comprehensive Cancer Center while Georgia had none. Cancer patients with Internet access, medical insurance, and travel funds demonstrated effectively that access to research contributed significantly to their treatment decision-making. In record numbers, Georgians sought second opinions, if not care, in states with leading cancer research centers. In this climate, then-Governor Roy Barnes unveiled a bold initiative to channel a portion of the state's tobacco settlement funds into the newly formed GCC. One of the Governor's most emphatic demands was that no Georgian should leave the state to obtain quality cancer care.

The Governor's directive—combined with increased awareness of the relationship between research and quality care—proved powerful motivators for this new entity. The GCC joined with the Georgia Chapter of the American Society of Clinical Oncology (GASCO), the American Society of Clinical Oncology (ASCO), the American Cancer Society, and the Oncology Nursing Society (ONS) to develop a business plan for a model statewide research network.

Today, the GCC is an independent, not-for-profit organization, uniting government agencies, academic institutions, civic groups, corporations, and healthcare organizations in a concerted effort to strengthen:

- Cancer prevention
- Early detection and screening
- Diagnosis
- Staging and treatment
- Palliation.

The organization's goal: to make Georgia one of the nation's premier states for cancer care. Its mission: to reduce the number of cancer-related deaths in Georgia. All of the Coalition's activities, programs, and financial resources are organized around five goals:

1. To prevent cancer and detect existing cancer earlier.
2. To provide quality care for all Georgians with cancer.
3. To establish ongoing, collaborative processes for addressing cancer data and metrics in the state.
4. To position Georgia as a destination site for cancer patients, biotechnology, and biomedical companies in the southeastern United States.
5. To generate a combination of state, federal, and private funds to support the fight against cancer.

Using a unified and comprehensive approach, the GCC focuses its resources on statewide initiatives, including the Georgia Cancer Quality Information Exchange (page 40); the Georgia Center for Oncology Research and Education (page 42); the Regional Cancer Coalitions of Excellence (page 39); the Distinguished Cancer Clinicians and Scientists Program (page 43); and the BioRepository Alliance of Georgia (page 39).

Comprehensive Cancer Control

In 2001 the GCC facilitated the creation of a strategic statewide cancer plan that served as the reference point for cancer control activities for five years. The plan represented the dedicated work of a diverse population of stake-

holders, who remain committed to comprehensive cancer control throughout Georgia.

As a part of its mission to improve the quality of cancer care throughout the state, the GCC commissioned an Institute of Medicine (IOM) study in 2004. In its 2005 report, *Assessing the Quality of Cancer Care: An Approach to Measurement in Georgia,* the IOM outlined a matrix of 52 measures to serve as guideposts for state cancer control activities (see Figure 1, page 41). The measures are designed to:

- Gauge Georgia's progress in improving the quality of cancer care
- Close the gap between what is known and what is practiced in cancer care
- Identify benchmarks for achieving the goals of the GCC
- Guide policy and prioritize public and private investments
- Quantify economic, geographic, racial, and ethnic disparities in cancer care in Georgia.

Table 1 shows how each of the GCC's statewide initiatives corresponds with the IOM's 52 Quality of Cancer Care Measures as outlined in Figure 1.

In April 2006 coalition partners then began the task of revising the state's cancer plan. This revision, predicated on the IOM-recommended 52 measures of quality care, focuses Georgia's comprehensive cancer control activities for the next five years on specific and measurable objectives. In so doing, this plan provides the state with the greatest opportunity to save lives and achieve measurable and sustainable improvement in cancer prevention, detection, and care.

Leading these efforts was a group of key stakeholders who represented Georgia at the Comprehensive Cancer Control (CCC) 2006 Leadership Institute organized by the Centers for Disease Control and Prevention (CDC). These stakeholders became the core of the Steering Committee with oversight for the revision of Georgia's cancer plan. Executive leadership of the Committee was jointly provided by Stuart Brown, MD, director, Division of Public Health, and William J. Todd, GCC president and CEO. In turn, the GCC engaged the Georgia Health Policy Center to facilitate the stakeholder conversations necessary for developing the revised plan. (See Table 2 for a list of Steering Committee member organizations.)

The Steering Committee defined the plan's purpose and established the principles that governed the planning process (see Table 3). The group committed early on to value the input of multiple and diverse voices in the revision of the state cancer plan and to be responsible for disseminating, embracing, and implementing the plan. Great emphasis was placed on ensuring that the plan contained the measurable objectives necessary to gauge success over time.

Working Together as a Team

The Steering Committee developed a timeline and invited more than 125 cancer experts, survivors, caregivers, and other stakeholders to participate in an inclusive process to redesign the state cancer plan. In August 2006 nearly 100 individuals participated in a one-day Work Group Congress, which marked the start of a six-month revision effort. Revision of the existing plan was organized around five topic areas:

1. Prevention
2. Early detection and screening
3. Diagnosis and staging
4. Treatment and palliation
5. Data and metrics.

The Data and Metrics Group provided information on metrics and baseline data values from the IOM's 2005 report. Members from this group served as a resource to the other groups for developing goals and objectives.

In addition to their respective focus areas, work groups addressed the cross-cutting themes of disparities (access), survivorship, sustainability, workforce, and research in the development of their goals and objectives. Working with the Georgia Health Policy Center, the work groups convened stakeholder meetings to converse, share information, and reach decisions.

Each work group defined its scope and developed goals, objectives, and strategies to address critical issues affecting the principal areas of the continuum of cancer (see Table 4). Two co-chairs (one a member of the Steering Committee and one a subject matter expert) led each work group. While work groups revised portions of the plan independently, the overlap of membership with the Steering Committee helped ensure continuity of purpose, focus, and translation of data across all areas.

An Implementation Planning Consortium made up of volunteers from the work groups and other key stake-

Table 1. Relationship of GCC's Statewide Initiatives to Quality Cancer Care Measures

Initiative	Corresponding IOM Quality of Cancer Care*
BioRepository Alliance of Georgia for Oncology (BRAG-Onc)	5-2, 5-3, 5-4, 5-5, 5-6, 5-7, 5-8, 5-9, 5-10, 5-11, 5-12, 5-13, 5-14, 6-1,6-15, 6-16, 6-17, 6-18, 6-19, 6-20, 6-21, 6-22, 6-23
Distinguished Cancer Clinicians and Scientists (DCCS) Program	
Georgia Cancer Cohort Study	3-2, 3-3, 3-4, 3-5, 3-6, 3-7, 3-8, 3-9, 3-10, 4-1, 4-3, 4-4, 4-5, 6-15, 6-16, 6-17, 6-18, 6-19, 6-20, 6-21, 6-22, 6-23
Georgia Cancer Quality Information Exchange (The Exchange)	
Georgia Center for Oncology Research and Education (Georgia CORE)	6-1
Regional Cancer Coalitions of Excellence (RCCEs)	3-2, 3-3, 3-4, 3-5, 3-6, 3-7, 3-8, 3-9, 3-10, 4-1, 4-3, 4-4, 4-5, 6-15, 6-16, 6-17, 6-18, 6-19, 6-20, 6-21, 6-22, 6-23

* *Assessing the Quality of Cancer Care: An Approach to Measurement in Georgia*. 2005. Committee on Assessing Improvements in Cancer Care in Georgia, National Cancer Policy Board; Eden J and Simone JV, editors. The National Academies Press: Washington, D.C. Available online at *http://books.nap.edu/catalog.php?record_id=11244*. Last accessed April 16, 2008.

Table 2. CCC Steering Committee Member Organizations:

- American Cancer Society (Georgia)
- Commission on Cancer – American College of Surgeons (Georgia)
- Dia de La Mujer Latina (Georgia)
- Georgia Cancer Coalition (GCC)
- Georgia Cancer Quality Information Exchange
- Georgia Department of Human Resources
- Georgia Department of Community Health
- The Harbin Clinic
- Nancy N. and J.C. Lewis Cancer & Research Pavilion – St. Joseph's/ Candler Health System
- National Cancer Institute – Cancer Information Service (Georgia)
- Northwest Georgia Cancer Coalition
- Rollins School of Public Health, Emory University
- Southwest Georgia Cancer Coalition
- West Central Georgia Cancer Coalition

Table 3. Components of Georgia's CCC Plan

Purpose

1. To create a roadmap that builds on current strengths, integrates previous planning efforts, and establishes priorities.
2. To allocate responsibilities, set targets, and establish timelines using evidence-based metrics in order to focus the efforts of all stakeholders.
3. To develop a collaborative framework so that the people of Georgia will benefit as the state becomes a recognized leader in cancer prevention, detection, and care in the nation.

Principles

1. To honor diverse and inclusive input to a "living" and time-relevant document.
2. To adopt realistic approaches to ensure sustainability of plan over time.
3. To expect and encourage opportunities for genuine collaboration and teamwork among partners and stakeholders.
4. To value innovation and creativity while relying on evidence-based strategies and science in decision-making.
5. To encourage open communication.
6. To maintain the engagement of a significant cross-section of community level members in assessment, planning, implementation, and evaluation.

This partnership is the first time that competing healthcare organizations from different geographic regions in Georgia have joined together to collaborate and share information, best practices, and funding...

holders provided the operational details of the revised plan and ensured that the implementation phase considers synchrony [coordinates] with other state-level efforts.

The revised Plan is a "living" document that allows for continuous input and updating as contextual elements change. The revised cancer plan serves as a blueprint for Georgia to save more lives and achieve measurable and sustainable improvements in cancer prevention, detection, and care.

The successful launch of *Georgia's Comprehensive Cancer Control Plan 2008-2012* tied together the GCC and the numerous statewide initiatives discussed in this article. The state's cancer control plan—which now includes the GCC and the statewide initiatives—is connected closely to National Cancer Institute (NCI) programs. In June 2007, this statewide alignment was further enhanced when one of GCC's Quality of Care demonstration sites, St. Joseph's/Candler Health System, was selected as a pilot site for the NCI's Community Cancer Centers Program (NCCCP).

NCI's Community Cancer Centers Program

In late 2006 and early 2007, NCI launched the NCCCP project, a three-year pilot phase that will enhance state-of-the-art cancer care to patients in community hospitals across the United States. In his address at the launch of the pilot, NCI Director John Niederhuber, MD, indicated that the methodology for the program was multi-faceted:

1. To improve access to care by bringing more Americans into a system of high-quality cancer care and reducing cancer disparities.
2. To bring the latest science to cancer patients by managing a patient care solution—not just a therapy—and increasing participation in clinical trials.
3. To create new knowledge and technology faster than ever before.

Dr. Niederhuber further described the future by outlining the accomplishments that were expected at the end of the three-year pilot: "Through research, we will have determined the best methods to enable the provision of state-of-the-art, multispecialty care and early-phase clinical trials in community-based locations to meet the needs of the people."

Bringing together a number of community-based cancer centers, the NCCCP pilot program is designed to bring the latest scientific advances and the highest level of innovative care to patients in their home communities. The NCCCP program is founded on seven "pillars."

1. ***Disparities and Outreach.*** Research confirms that equal treatment at same stage of disease yields equal outcomes, so NCCCP pilot sites will study, understand, and attempt to improve healthcare disparities.
2. ***Clinical Trials.*** NCCCP pilot sites will increase both the number of Phase I and Phase II clinical trials in the community setting and the number of patients enrolling in clinical trials in the community setting.
3. ***Cancer Biomedical Informatics Grid.*** This tool will link NCCCP pilot sites to national databases supporting basic, clinical, and population-based research.
4. ***Biorepositories and Biospecimens.*** NCCCP pilot sites will prepare to standardize the collection and storage of biological specimens for cancer research.
5. ***Quality of Cancer Care.*** NCCCP pilot sites will be involved in ongoing quality care measures and definitions of "quality" in cancer management.
6. ***Survivorship and Palliation.*** NCCCP pilot sites will develop comprehensive survivorship and palliative care programs.
7. ***Advocacy.***

The GCC orchestrated an historic, innovative, and collaborative alliance of community cancer centers across southeast, southwest, and northeast Georgia—all serving largely rural, underserved populations to apply for the prestigious NCCCP project. In June 2007, St. Joseph's/Candler Health System, represented through the Nancy N. and J.C. Lewis Cancer & Research Pavilion in Savannah, was selected as a pilot site for the NCCCP. The Harbin Clinic in Rome, Ga., and the John B. Amos Cancer Center in Columbus, Ga., are clinical alliance partners in the NCCCP program. This partnership is the first time that competing healthcare organizations from different geographic regions in Georgia have joined together to collaborate and share information, best practices, and funding in order to improve the overall care for cancer patients in Georgia.

To assure that all efforts across the seven "pillars" of the pilot project are documented, collecting the appropriate indicators for the pilot is critical to the overall success and a cornerstone of the NCCCP pilot. The first six months of the NCCCP project were heavily focused on Baseline Assessment Surveys (BAS) and metrics development that will measure the end results of the selection as an NCCCP pilot site. RTI International (RTI), located in Research Triangle Park in North Carolina, was selected by NCI to evaluate all pilot programs within the NCCCP program. RTI started by using the BAS to develop an appropriate and comprehensive evaluation plan for all NCCCP pilot programs. This plan will be the guide for evaluation of the metrics and methods developed by the pilot sites over the next 3+ years. While RTI will be responsible for conducting comparative case studies, a cost study, and a patient survey, as well as providing ongoing feedback to NCI staff

on overall program development, each pilot site will develop its own metrics and methods.

At St. Joseph's/Candler Health System, a navigation services team comprised of nurses, social workers, cancer registrars, a nutritionist, a clinical initiatives manager, an IT manager, and an outreach coordinator, have convened to address data needs across the continuum of care. The success of this effort will hinge on rapid data acquisition through a coordinated approach between the cancer registrars and their clinical resource partners, such as the nurse navigators, social workers, and the nutritionist. The IT manager and the clinical initiatives manager will work closely with the team to eliminate duplication of effort and to streamline data collection by capitalizing on data elements already within the healthcare system's Meditech Electronic Medical Record. Over time, St. Joseph's/Candler Health System will be able to determine the cost effectiveness and the quality impact of this approach.

Today, Georgia residents are participants in one of the most united and comprehensive cancer programs in the nation. The GCC is successfully creating a statewide coalition of competing hospitals, physicians, public health agencies, and non-profit organizations with a common goal of providing the highest quality of cancer care to the patients of Georgia. Other states can learn from this collaborative, statewide effort to create similar models of care in their own communities.

Table 4. Goals of the CCC Workgroups

Prevention Workgroup
- ✔ Reduce the number of Georgians exposed to the harmful effects of tobacco.
- ✔ Reduce overweight and obesity and increase physical activity among children, adolescents, and adults in Georgia.
- ✔ Reduce the incidence of cervical cancer in Georgia.

Early Detection and Screening Workgroup
- ✔ Remove barriers to cancer screening services.
- ✔ Stimulate participation in recommended screenings for breast, colorectal, cervical, and prostate cancers.
- ✔ Improve the quality and effectiveness of cancer screening and follow-up services.
- ✔ Become a national leader in translational research related to screening practices for Georgia's cancers with the greatest burden.

Diagnosis and Staging Workgroup
- ✔ Ensure the timeliness and quality of tissue acquisition, pathology, and staging prior to treatment for cancer.
- ✔ Ensure the uniformity and accuracy of documentation regarding cancer diagnosis and staging.

Treatment and Palliation Workgroup
- ✔ Ensure compliance with the National Comprehensive Cancer Network (NCCN) guidelines for the treatment of colorectal, lung, breast, and prostate cancer in Georgia's hospitals.
- ✔ Increase accrual of Georgia residents to cancer clinical trials.
- ✔ Increase the proportion of cancer patients in Georgia who receive palliative care and support from the time of diagnosis.

Data and Metrics Workgroup
- ✔ Establish ongoing, collaborative processes for addressing cancer data and metrics issues in Georgia.
- ✔ Improve stakeholder knowledge and use of available cancer data.
- ✔ Expand and enhance cancer data collection from existing and new sources.
- ✔ Implement improved information management tools and technologies.

Nancy M. Paris, MS, FACHE, is president and CEO of the Georgia Center for Oncology Research and Education (Georgia CORE) in Atlanta, Ga. Susan Irby, MSHS, heads the decision support practice for Maestro Strategies, LLC, and is the project manager for the demonstration sites of The Exchange. Rhonda Mealor is an owner and senior partner of Oncology Solutions, LLC, and led the first demonstration project between The Exchange and Saint Joseph's/Candler Health System. Kate Canterbury, MPA, is the director of Research at the Georgia Cancer Coalition. Nancy Johnson, MSM, is the executive director of the Nancy N. and J.C. Lewis Cancer & Research Pavilion, Savannah, Ga.

References

[1]Singh S, Bayakly AR, McNamara C, Redding K, et al. *Georgia Cancer Data Report, 2005*. Georgia Department of Human Resources, Division of Public Health, Chronic Disease, Injury, and Environmental Epidemiology Section, and the American Cancer Society, South Atlantic Division, February 2006. Publication Number: DPH06/007HW.

A Unified, Comprehensive Approach to Cancer Treatment

Regional Cancer Coalitions of Excellence

Cancer prevention programs, including tobacco cessation, are critical in the fight to reduce the number of cancer-related deaths in Georgia. Early detection and screening of cancer is the best guarantee for successful treatment against cancer. Early detection and screening not only saves lives; it reduces the costs and suffering caused by cancer because early stage disease is often amenable to less radical treatment. Between 1999 and 2003, 55 percent of colorectal cancers, 29 percent of breast cancers, and 47 percent of cervical cancers in Georgia were diagnosed past the early stages. To increase screening rates, it is necessary to remove barriers and to stimulate participation. An even greater challenge is ensuring that screening results are quickly communicated to patients and providers, and that a well-defined follow-up system is in place.

The means to provide culturally and linguistically appropriate information on prevention, early detection, and treatment to the public is essential. Availability of prevention education, early detection, and screening programs throughout Georgia is uneven at best, and significant disparities exist. It is well known that an approach that is highly successful in one community may be ineffective in another. One common denominator is involvement of, and ownership by, the community. Achieving community involvement and ownership relies upon participation by members of the community, placement of activities within community venues, and use of community organizations for support.

In order to enhance prevention education, early detection, and screening programs and to engage local communities in Georgia, the GCC established an initiative to develop nine Regional Cancer Coalitions of Excellence across Georgia. These Coalitions would provide basic cancer care to Georgians close to home that would end the unevenness of cancer care resources and service distribution across the state, and eliminate the disparities in access, treatment, and the burden of cancer in underserved communities. Of the nine original Regional Cancer Coalitions of Excellence, six are still in operation today, located in the following areas:

- Southwest Georgia
- Southeast Georgia
- East Georgia
- West Central Georgia
- Central Georgia
- Northwest Georgia

The GCC funds the cancer prevention and screening programs at each of the six Regional Cancer Coalitions of Excellence. Their programs, including Community Health Advisor projects, Smoking Cessation Training programs, and data collection projects, serve approximately 40 percent of the state's population. The GCC sees the Regional Cancer Coalitions of Excellence as a vehicle to:

- Build on existing cancer services
- Reduce duplication of effort as well as competition between service and support entities across the state
- Decrease the access disparities based on geography, ethnicity, and/or insurance status
- Adapt statewide efforts based on national standards to local communities
- Leverage state dollars and maximize opportunities for private investment.

Coalition building is one of the Regional Cancer Coalitions of Excellence's greatest successes. The program has brought together organizations, institutions, and individuals that had never worked together in the past. Even competing institutions were willing to set aside their differences to attain the mutual, overarching goal of "making state-of-the-art cancer care available to all Georgians." By finding common ground around improvements in cancer care, local partners were able to identify areas where they could collaborate rather than compete.

Further, the Regional Cancer Coalitions of Excellence were instrumental in the revision of the state's comprehensive cancer control plan. Several members of the Regional Cancer Coalitions of Excellence served on the Steering Committee, which provided the oversight of the revised plan. The Regional Cancer Coalitions of Excellence will be the driving force behind the successful implementation of many of the goals and objectives outlined in the revised cancer plan.

Bio Repository Alliance of Georgia (BRAG-Onc)

In conjunction with the Medical College of Georgia, the GCC initiated a statewide tissue and blood repository that reaches across the state to academic and community cancer programs. The program parallels NCI's pilot Community Cancer Centers Program (NCCCP), which identifies as one of its main objectives "increasing knowledge of infrastructure requirements, policies and procedures, costs and other issues (e.g., collaborations or contracts necessary for biospecimen collection, annotation, and storage) required for implementation of NCI Best Practices for Biospecimen Resources, thus enabling community hospitals to participate in biospecimen initiatives that will advance the NCI's research agenda."[1]

References

[1]National Cancer Institute. *Pilot Focus Areas Work Plans and Supporting Documents,* 2006. National Cancer Institute's Community Cancer Centers Program.

A Unified, Comprehensive Approach to Cancer Treatment

The Georgia Cancer Quality Information Exchange

In 2004 with funding from the Woodruff Foundation, the GCC engaged the Institute of Medicine (IOM) to conduct a landmark study identifying key means of measuring progress in cancer care in the state of Georgia. The resulting 2005 report, *Assessing the Quality of Cancer Care: An Approach to Measurement in Georgia,* served as the basis for the state's Comprehensive Cancer Control Plan, as well as for a new entity—the Georgia Cancer Quality Information Exchange ("The Exchange"), dedicated to knowledge exchange between provider organizations across the state. The vision of The Exchange is to: "Facilitate the design, access, and retrieval of clinical information and public health data for the purposes of measuring the quality of cancer care, enhancing adherence to standards of care and improving patient centered care and outcomes through process change."

Central to this vision is the development of a "Dashboard" that displays the current status of each indicator on a statewide basis, as well as trending information to document Georgia's progress in cancer care quality (see Figure 1). Cornerstones of this approach include the use of electronic medical records from providers, where available, to populate the dashboard. The dashboard of 52 metrics (as outlined in the IOM 2005 report) includes:

- 10 related to cancer prevention
- 5 related to early detection
- 14 related to diagnosis
- 23 related to treatment and palliative care.

To implement this groundbreaking approach, the GCC enlisted several volunteer provider groups to serve as "Demonstration Projects" to validate that metrics can be extracted from provider records and that changes in process can result in quality improvement. Each demonstration project has concentrated on a specific disease site (e.g., breast) to identify means of data mining and to capitalize on lessons learned when results of data mining are presented to multidisciplinary care groups.

To date, demonstration partners have included:

- St. Joseph's/Candler Health System, Savannah, Georgia
- The Rome Georgia Community, including The Harbin Clinic, Floyd Medical Center, and Redmond Regional Medical Center
- Piedmont Hospital—part of Piedmont Healthcare System, Atlanta, Georgia
- The John B. Amos Cancer Center—part of the Columbus Regional Healthcare System.

Each demonstration site has a story to tell about lessons learned. For example, because the timeliness of staging each patient prior to treatment is critical to ensure patients are on the best treatment protocol for their specific cancer, one site decided to stage each new cancer patient at its weekly action team meeting and record it real-time in their EMR, thus ensuring patients are staged prior to treatment.

At another demonstration site, data analysis identified that scheduling women with abnormal mammograms for biopsies was taking several weeks. Using process improvement, the demonstration site reduced time to biopsy to less than seven days.

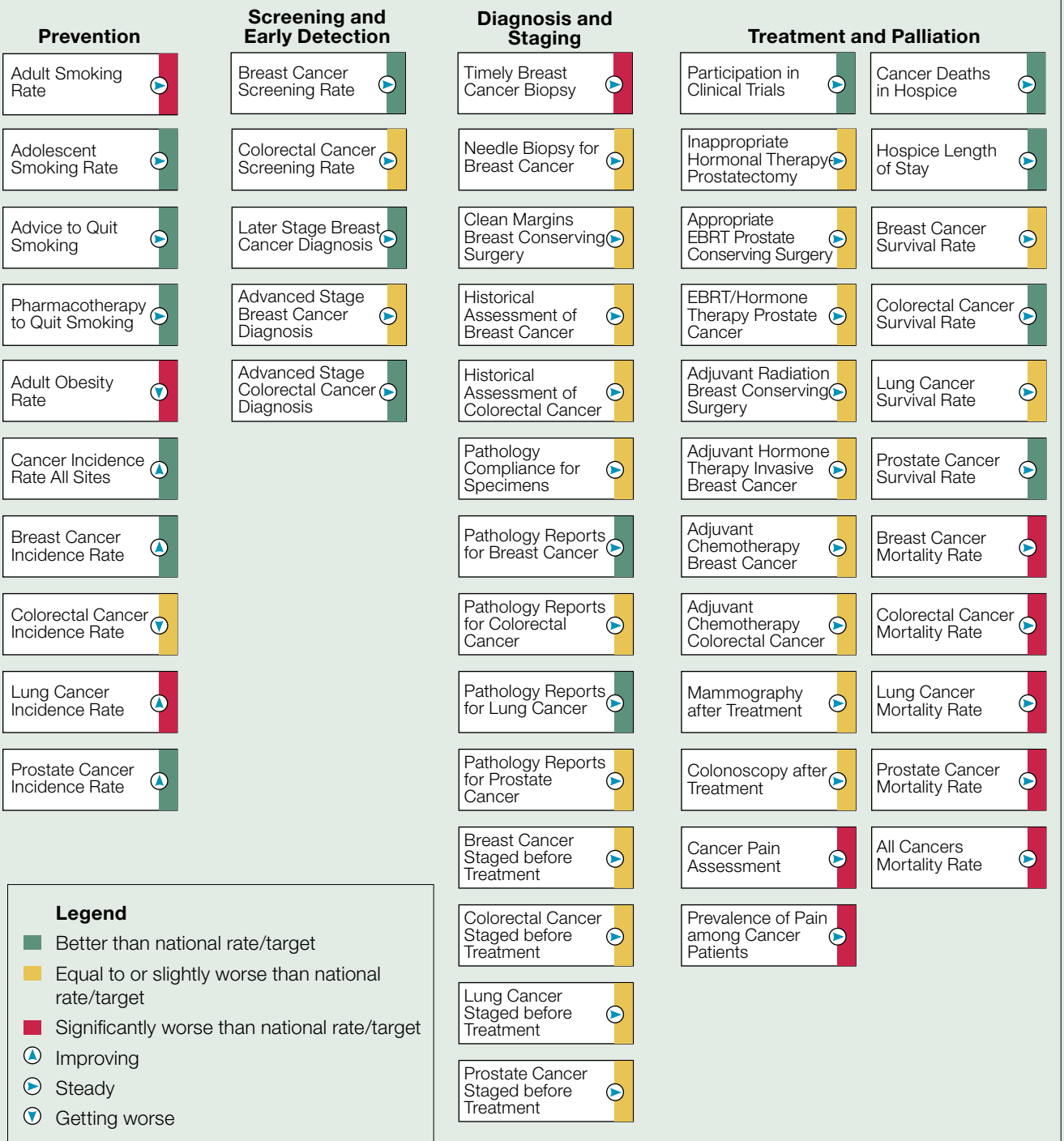
Another demonstration site was able to improve cancer pain management. One practice was doing a good job of documenting patients' pain levels at each visit. When the physician reviewed the data, he saw that many patients were reporting high pain levels. Unfortunately, the practice did not have a process in place to address these patients. The change was immediate: any patient with a high pain level was to be seen by the physician as soon as possible to determine how the pain would be managed.

Obviously, the opportunity for cancer care teams across the state to collaborate around lessons learned and best practices is a critical component of The Exchange. Today, The Exchange is in the process of forming Statewide Disease Site Clinical Quality Improvement teams to:

- Facilitate collaboration
- Review data
- Develop baselines, benchmarks, and targets related to quality care
- Evaluate existing indicators
- Identify new indicators
- Review collection processes.

Finally, to create a dashboard that represents statewide performance across the 52 indicators in the 2005 IOM report, a technology infrastructure must be put in place. At the time of this article's publication, key features and functionalities have been defined; vendor proposals solicited, received and reviewed; and vendor demonstrations conducted. Based on the results of vendor demonstrations, a preferred partner (or partners) is being identified and negotiations for a "proof of concept" project are underway, linking many of the current demonstration project partners into the first generation of the dashboard.

Figure 1. The Georgia Cancer Quality Information Exchange Clinical Dashboard*



*This dashboard is for illustrative purposes only and does not reflect actual performance. The purpose of the dashboard is to gauge progress over time for the 52 metrics identified by the Institute of Medicine. This "at a glance" display indicates which areas are performing well (green), which items need attention (yellow), and which items need immediate intervention for improvement (red). In addition, the arrow associated with each metric indicates whether performance is improving, holding steady or getting worse.

FIGURE 1 COURTESY OF THE GEORGIA CANCER QUALITY INFORMATION EXCHANGE

A Unified, Comprehensive Approach to Cancer Treatment

The Georgia Center for Oncology Research and Education (Georgia CORE)

A novel collaboration of clinicians, scientists, educators, public health practitioners, and those affected by cancer, Georgia CORE is governed by a voluntary Board of Directors comprised of physicians and cancer researchers representing leading oncology practices and the state's four medical schools. Georgia CORE's business plan is based on information from interviews and focus groups conducted across the state. The plan called for creation of a non-profit organization whose purpose was "to improve access, entry, conduct, and outcomes of cancer control and therapeutic clinical trials for Georgia residents."

Presented for review and comment at a conference late in 2002, the plan received widespread support from physicians, care providers, educators, and scientists. The Board of Directors identified key opportunities for programmatic success, which would 1) provide value to oncology practices, 2) increase visibility of academic and community investigators, and 3) develop new research opportunities.

Georgia CORE became fully operational in 2005, with the opening of offices donated by the GCC and the leadership of the Board combined with a small group of staff, interns, and consultants. With a simplified plan and a committed staff, Georgia CORE promptly secured a multi-year commitment of $2.5 million from the GCC, which required a 1:1 match of earned income, grants, and gifts in kind. Additional start-up funding was provided by GASCO; Siemens Medical Solutions; the Oncology Nursing Society (ONS); and the Schools of Medicine at Emory University, the Medical College of Georgia, and Mercer University.

In two years, Georgia CORE has achieved significant results. Public relations and educational programs have increased awareness of cancer research, the role of oncologists in clinical trials, and Georgia CORE's mission. The central message—that clinical cancer research is crucial to providing Georgians with the best available cancer treatment—is being delivered consistently.

Georgia CORE serves as a mechanism for contracting between community and academic oncologists, medical centers, industry, and cooperative groups for the purpose of increasing access to clinical trials in Georgia. The terms of Georgia CORE's Master Clinical Research Agreement allow oncologists to open trials appropriate to their patient population and research interests. The infrastructure required to broker and negotiate contracts is provided by Georgia CORE through a grant from the GCC. Additional shared services provided by Georgia CORE include education, regulatory, quality monitoring, analytics, and financial management. These services, which are costly and burdensome, are often cited as obstacles to clinical trials participation by community oncologists.

Georgia CORE's research network began with master contractual agreements between Georgia CORE and six private practices comprised of 46 oncologists. Today, Georgia CORE has negotiated contracts with more than half of Georgia's oncologists who provide care to adults (about 178 individuals). In addition, agreements are in place with industry sponsors of Georgia CORE investigator-initiated trials and the NCI-sponsored Gynecologic Oncology Group, as well as with medical schools and healthcare systems across the state. Contract negotiations continue and the organization anticipates having 75 percent coverage of adult oncologists by the end of 2008. Georgia CORE has established a contracting mechanism that provides for the statewide introduction of investigator-initiated trials (see Figure 2). This service is highly valued by community oncologists, academic centers, and industry.

Georgia CORE offers research education programs, including annual principal investigator training, quarterly continuing education for investigators and research associates, and semi-annual intensive training programs for new clinical research associates. In 2008, the first *The Georgia CORE Directory* was published, a unique source of information on more than 450 adult and pediatric oncologists in Georgia, their contact information and practice locations, educational backgrounds, research interests, and network affiliations.

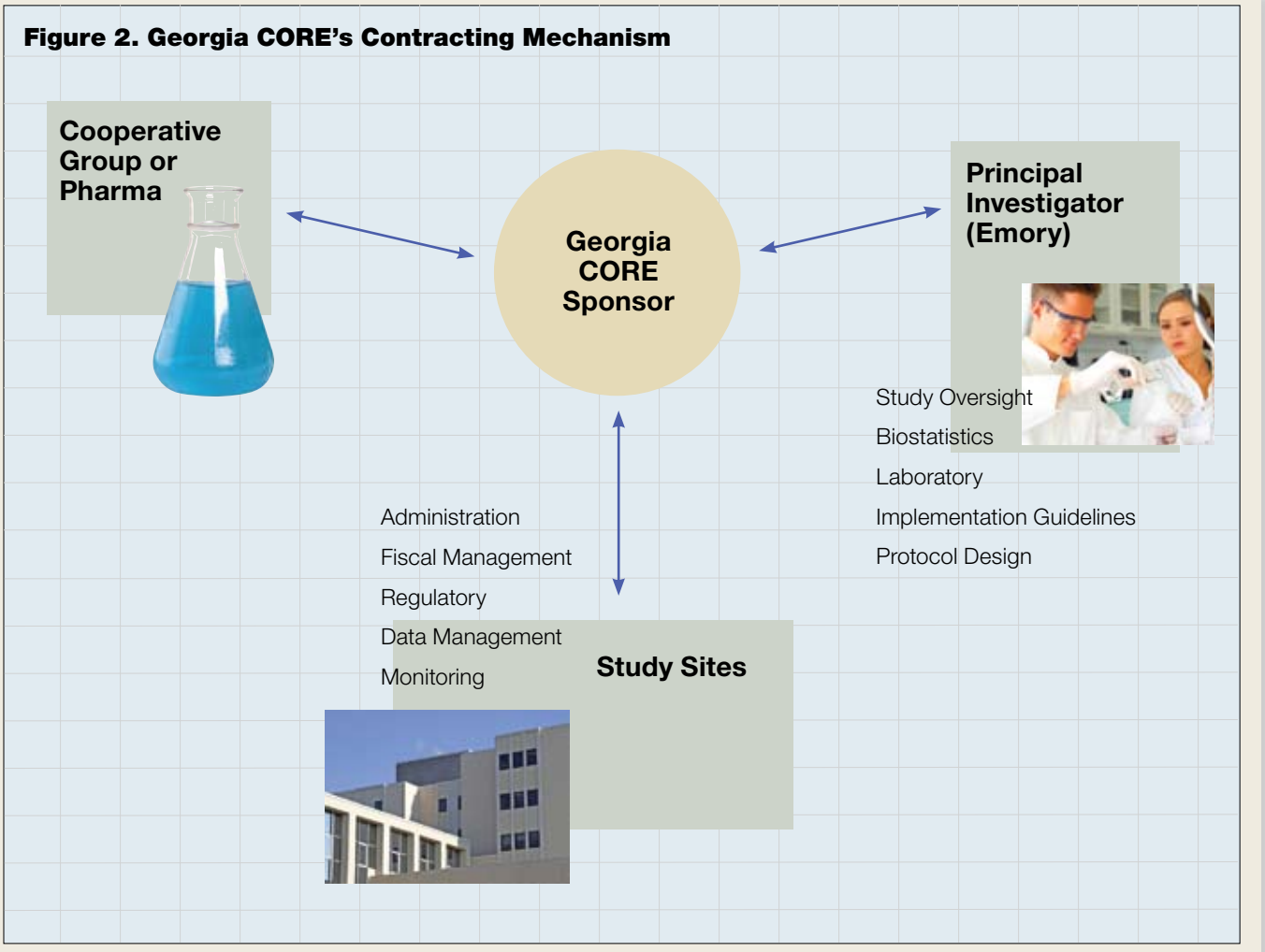
Georgia CORE has also increased access to clinical trials by developing a searchable database of cancer clinical trials offered throughout Georgia in partnership with the Coalition of Cancer Cooperative Groups. This web-based database is developed from downloads of national registries and information provided by members of the Georgia CORE research network. After a scrutiny of national registries found them to be less effective for patient decision-making and referrals, Georgia CORE established a mechanism for augmenting the title, protocol ID, sponsor, and description available via the national registries with regular updates provided by members of the research network. The database is available online at: *www.georgiacancertrials.org*.

Georgia CORE uses a variety of tools to benchmark its work, including data on media coverage, requests for speaking engagements, website activity, attendance at educational programs, office call volume, and the number of contract negotiations between the program and providers.

Today, Georgia CORE offers complete, reliable, and timely information on clinical trials offered in the state of Georgia. And, the end results speak for themselves. The number of trials captured in the Georgia Cancer Trials database has doubled over a two-year period. The number of database searches has more than quadrupled. Currently, 386 adult cancer trials are offered in 53 research sites in 27 cities across the state.

PHOTOGRAPHS/COMSTOCK/BIG STOCK/FOTOLIA

Figure 2. Georgia CORE's Contracting Mechanism



GCC's Distinguished Cancer Clinicians and Scientists Program

The Distinguished Cancer Clinicians and Scientists program is a critical element of the GCC's research agenda. The program's goal is to recruit to Georgia leading and nationally renowned cancer clinicians and scientists to strengthen the state's research talent, capacity, and infrastructure. As an obvious feeder to the Georgia CORE program, selection of the scholars is closely aligned with the NCI's "Extraordinary Opportunities in Cancer Research." This NCI program has identified areas of discovery that build upon recent developments in genes and the environment, cancer imaging, research on tobacco, cancer communications, and other findings.

The GCC provides funding ranging from $50,000 to $150,000 per year for five years to institutions that recruit scholars awarded the title of Coalition Distinguished Clinician or Scientist. The Eminent Scholars, as they are often referred to, are required to report to the GCC annually, describing their research, funding, publications, patents, and presentations. The program's original objective was to recruit 150 scholars into the state. To date, the GCC has funded 78 and plans to extend the program upon completion of the original goal. Today, these scholars see as many as 100 patients a day.

The GCC's Distinguished Cancer Clinicians and Scientists Program has recruited scholars such as Otis Brawley, MD, a renowned leader in the field of health disparities research and Chief Medical Officer for the American Cancer Society, and Michael Ericksen, MD, who led a team of researchers that surveyed more than 200 tobacco farmers in Georgia and discovered that Georgia farmers are interested in growing crops that help prevent cancer, rather than cause it.