

**Evaluation and Performance Measurement Plan**

**Program Title: Georgia Initiative to Mobilize Partnerships for Prevention and Action for Cancer, Tracking, and Registration**

**Program 1 (Georgia Breast and Cervical Cancer Program)**

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The GBCCP acknowledges valuable input from the GBCCP Evaluation Stakeholder Work Group members.

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1. **Introduction**

**1.1 Background:** Breast cancer is the leading cause of cancer among women in Georgia, with almost 7,200 women expected to be diagnosed in 2016. It is also the second leading cause of cancer deaths among Georgia women, with approximately 1,300 expected deaths in 2016 (Cancer Facts & Figures 2016; ACS, 2016). Black women in Georgia have traditionally had the paradox of having lower breast cancer incidence rates but higher breast cancer mortality rates than White women. However, in recent years, Black women’s breast cancer incidence rate has also progressively increased compared to that among White women (Georgia Comprehensive Cancer Registry (GCCR), 2010-2014). Despite of widespread use of Pap testing in recent years, 430 women are still being diagnosed, and 130 women are dying from cervical cancer in Georgia each year (GCCR, 2010-2014). Racial disparities in cervical cancer are still apparent, with Black women in Georgia having significantly higher cervical cancer incidence and mortality rates than White women. Early detection of breast and cervical cancer are the keys to survival; however, mammography for breast cancer and Pap testing for cervical cancer are only useful tools when these services are available and accessible among women. Barriers to breast and cervical cancer care and prevention include financial burdens, issues related to health insurance, lack of transportation, cultural/linguistic issues, as well as lack of knowledge and awareness about cancer prevention methods and the benefits of screening. As of 2014, there were approximately 750,000 women under age 65 in Georgia without health insurance, and over 500,000 of these women had incomes below 200% of the federal poverty level (Small Area Health Insurance Estimates, U.S. Census, 2016). Because not all women have access to cancer screening services, health disparities persist, and cancer morbidity and mortality continue to affect the wellbeing of Georgia’s population.

**1.2 Plan overview:** This comprehensive evaluation plan will follow the procedures and standards recommended by the CDC’s Framework for Program Evaluation in Public Health. Ms. Janet Shin, an internal Georgia Department of Public Health (GDPH) staff, will serve as the lead Georgia Breast and Cervical Cancer Program (GBCCP) evaluator. The evaluator will use a mixed methods approach that involves quantitative and qualitative methodologies. Process and outcome evaluations will be performed. Key evaluation questions are summarized as follows: *What are the facilitators and barriers to implementing program strategies and activities as planned? How can the program reduce these barriers? To what extent does the program implement screening, diagnostic services, patient navigation, and evidence-based interventions? Do breast and cervical cancer screening rates change after implementing evidence-based interventions and supportive activities?*

**1.3 Evaluation purpose:** The purposes of the program evaluation and performance measurement are to monitor the program activities; to determine the program effectiveness; to identify areas to improve program implementation; and to promote accountability among program stakeholders.

1. **Stakeholders of evaluation results**

Primary stakeholders for the evaluation include the GBCCP staff, GDPH Health Districts and local health department staff, other participating providers (e.g., federally qualified health centers, or FQHCs), the American Cancer Society (ACS) and the Centers for Disease Control and Prevention (CDC) (**Table 1**). The Evaluation Stakeholder Work Group (ESW) will consist of selected representatives of these stakeholders. The GBCCP evaluator will convene and collaborate with the ESW throughout the project duration to ensure that the program takes a participatory approach in planning and implementing the evaluation activities.

**Table 1.** Stakeholder assessment and engagement plan

|  |  |  |
| --- | --- | --- |
| **Stakeholder Name** | **Role of Stakeholder** | **Priority Areas for Evaluation** |
| Centers for Disease Control and Prevention (CDC) | Monitor program deliverables, requirements and performance measures | Provide technical assistance & support for evaluation plan implementation; assess program monitoring and evaluation performance objectives; assess, summarize, document and disseminate evaluation results |
| \*Georgia Department of Public Health (GDPH) Georgia Breast and Cervical Cancer Program (GBCCP) | Ensure program success through monitoring of program goals, objectives, funding, reports and data | Guide evaluation design and implementation; use evaluation results to inform program planning and quality improvement |
| \*GDPH Health Districts and local health departments | Perform screening, follow-up diagnostic evaluation, case management and evidence-based interventions (EBIs) | Collect and provide data; use evaluation results to inform program planning and quality improvement |
| \*GDPH, Chronic Disease Prevention Section, Reporting and Evaluation Unit | Collect, analyze, report and evaluate program data | Develop and implement evaluation plan; provide recommendations from results; assess, summarize, document and disseminate evaluation results |
| GDPH, Related Chronic Disease Programs | Collaborate with the GBCCP to streamline chronic disease prevention efforts | Use evaluation results to implement and enhance performance of respective program |
| \*American Cancer Society (ACS) Patient Navigation Program (PNP) | Provide navigation and education, implement EBIs | Collect, analyze and report the ACS PNP data; use evaluation results to inform PNP planning and quality improvement |
| \*Participating providers e.g., FQHCs | Perform screening, follow-up diagnostic evaluation, case management and EBIs | Collect and provide data; use evaluation results to inform program planning and quality improvement |
| Women’s Health Medicaid Program | Provide treatment fees for the GBCCP eligible women diagnosed with cancer | Collect data |
| Georgia Cancer Control Consortium | Implement statewide cancer plan | Disseminate evaluation results |
| Women receiving the GBCCP services | Receive the GBCCP services | Provide data |

\*One or more representative(s) from these stakeholders will participate as members of the ESW.

1. **Program description**

**3.1 Program purpose and priority populations:** The purpose of the GBCCP is to offer timely and appropriate breast and cervical cancer screening and diagnostic services to uninsured or under-insured women in Georgia at or below 200% of the federal poverty level. The program has special focus on priority population groups, including women of all races and ethnicities without other sources for cancer screening services; women in priority age groups (i.e., age 40-64 for breast cancer screening and 21-64 for cervical cancer screening); women who have been rarely or never screened; and, those who are likely to access healthcare services through local health departments, FQHCs, or other participating health systems. By concentrating efforts to reach our priority populations, the GBCCP aims to reduce health disparities and reduce cancer morbidity and mortality rates in Georgia.

**3.2 Program activities:** The GBCCP implements activities related to three primary strategies (environmental approaches, community-clinical linkages and health systems changes) and four cross-cutting strategies (program collaboration, external partnerships, cancer data/surveillance and program monitoring and evaluation). Focus of this program is to provide high quality breast and cervical cancer screening and diagnostic services to eligible women. Through collaboration with the Georgia Center for Oncology Research and Education (GA CORE), women at high risk for the hereditary breast and ovarian cancer genes are screened in the GDPH health districts. Women with positive diagnoses are enrolled into the Women’s Health Medicaid Program and referred to treatment services and other programs for additional support. The ACS Patient Navigation Program (PNP) works in tandem with the GBCCP to provide population-based community education on cancer and facilitate access to receive screening and diagnostic services offered through the GBCCP. The GBCCP uses available data to evaluate placement of navigators and identify additional areas of need and priority populations. Navigators implement evidence-based interventions (EBIs), including client reminders, group education, one-on-one education, reduction of structural barriers to care and small media. Assessing patients for tobacco use and referring those who smoke to the Georgia Tobacco Quit Line is an ongoing activity of the program. Also, the GBCCP provides breast and cervical cancer education and training to statewide public health providers. During this project duration, the GBCCP will expand its activities to promote cancer screening and diagnostic services by implementing health systems interventions, community approaches that link women to clinical services, and environmental approaches that promote screening at worksites. The GBCCP will establish a formal agreement with new FQHCs to implement and assess clinic data, including clinic-level screening rates, EBIs and supportive activities. Navigators will provide group education on breast and cervical cancer screening at worksites, and facilitate access to cancer screening for eligible employees who participated in worksite education.

**3.3 Program impact:** In fiscal year (FY) 2017, the GBCCP provided breast and cervical cancer screening and/or follow up services to 10,324 women with the CDC funds. Ninety five percent of the GBCCP recipients with abnormal breast cancer screenings completed follow-up services; and 98% of women with final diagnosis of breast cancer initiated treatment. Ninety two percent of women with abnormal Pap tests completed follow-up services; and 91% of women with final diagnosis of HSIL, CIN2, CIN3, CIS or invasive cervical carcinoma started treatment. The percentage of missed appointments among navigated cancer patients decreased from 8.9% in FY 2013 to 2.4% in FY 2016 (Jeon, Jones & Jimenez, 2017).

**3.4 Logic model:** The GBCCP logic model shows what the GBCCP plans to accomplish, and how program inputs, strategies and activities relate to anticipated outputs and outcomes (**Figure 1**).

Established health system and community partnerships to increase B & C cancer screening

Short-term Intermediate Long-term

**OUTCOMES**

No. of cancer programs leadership team meetings held

Women receiving GBCCP services

ACS

GBCCP Providers e.g. FQHCs

Public Health Districts

GDPH

CDC

**INPUTS**

Stable, experienced, and effective program management and leadership

**OUTPUTS**

**STRATEGIES AND ACTIVITIES**

**Strategy 1: Program Collaboration**

No. of partners developed, no. of partners maintained

**Strategy 2: External Partnerships**

**Strategy 3: Cancer Data and Surveillance**

Improved knowledge about B & C cancer screening among priority populations

High quality cancer data measured and used

**Strategy 4: Environmental Approach**

No. of education sessions, no. of employees educated

Provide breast, cervical (B & C) and colorectal cancer education at worksites

Facilitate access to B & C cancer screening for the GBCCP eligible employees who participated in worksite education

Increased intention to receive B & C cancer screening among priority populations

No. of participants in worksite education referred for B & C cancer screening

**Strategy 5: Community-Clinical Linkage**

No. of high quality staff and providers recruited and retained

Increased appropriate B & C cancer screening, rescreening and surveillance among priority populations

Expand patient navigation program, and implement evidence-based interventions (EBIs) e.g. client reminders, group education, one-on-one education, small media, and reducing structural barriers

Reduced B & C cancer morbidity and mortality

Reduced disparities in B & C cancer morbidity and mortality

Retention of high quality, experienced staff and providers

No. and types of EBIs implemented

Provide genomic screening by using the Breast Cancer Genetics Referral Screening Tool (B-RSTTM)

No. of clients screened by using B-RSTTM

GA CORE

Reduced structural barriers and increased access to B & C cancer screening and diagnostic services among priority populations

No. of B & C cancer screening & diagnostic services provided

Increased timely and appropriate diagnostic follow-up and cancer treatment referral among priority populations

No. of clients navigated, no. and types of barriers reduced

Provide timely and appropriate B & C cancer screening and diagnostic services to recipients

**Strategy 6: Health Systems Change**

No. of partner FQHCs, no. and types of EBIs & supportive activities implemented, clinic-level data collected

Recruit/navigate recipients to reduce barriers

No. of training sessions, no. of providers trained

Improved provider knowledge of performing B & C cancer examinations

Monitoring

**Strategy 7: Program Monitoring and Evaluation**

Partner with FQHCs, and implement & assess clinic-level data (e.g., screening rates), EBIs, & supportive activities

Train the GBCCP providers

1. **Evaluation focus**

Both process and outcome evaluations will be conducted. Key process evaluation questions include:

1. What are the facilitators and barriers to implementing program strategies and activities as planned? How can the program reduce these barriers?
2. To what extent do providers perform cancer screening and diagnostic services?
   1. How many women receive cancer screening and diagnostic services?
3. To what extent do navigators and/or program staff perform patient navigation, EBIs, and supportive activities to increase cancer screening?
   1. Which EBIs and supportive activities does each provider site (i.e., Public Health District, partner health system) implement?
   2. What is the average number of navigator contacts with clients?
   3. How many women receive client reminders and recalls?
   4. Which barriers to cancer care are identified and reduced? For each type of barrier, how many cases are identified and reduced?
   5. For how many providers does responsible health system staff perform provider assessment and feedback?

Key outcome evaluation questions are as follows:

1. Is the GBCCP meeting target values of clinical quality indicators?
   1. Does the GBCCP reach the priority population for cancer screening?
   2. What percentage of clients with abnormal screening results complete diagnostic follow-up?
   3. What percentage of clients with abnormal screening results receive timely diagnostic follow-up?
   4. What percentage of clients diagnosed with cancer initiate cancer treatment?
   5. What percentage of clients diagnosed with cancer initiate timely cancer treatment?
2. What percentage of patients receiving navigation for diagnostic follow-up complete diagnostic testing?
3. Do clinic-level screening rates change after implementing EBIs and supportive activities?

These evaluation questions were selected and prioritized based on programmatic needs, selected evaluation purpose, stakeholder interests and feasibility. The GBCCP evaluator will collaborate with program stakeholders to assess whether priorities and feasibility issues hold for these focused evaluation activities and refine these evaluation questions during the five-year project duration.

1. **Data collection**

A mixed methods approach, including quantitative and qualitative methodologies, will be used. Data collection plan is summarized in **Tables 2** and **3**. More detailed data collection plan and data management plan are included in Appendix.

**Table 2**. Summary of data collection plan for process evaluation

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Evaluation Question** | **Indicator** | **Performance Measure** | **Method** | **Data Source** | **Responsibility** |
| What are the facilitators and barriers to implementing program strategies and activities as planned? How can the program reduce these barriers? | Facilitators and barriers in program implementation, plans to reduce barriers, training and technical assistance needs | | Qualitative | Meeting notes, grantee workplans, reports, site visits, training needs assessment | Program Director (PD), Data Management/Quality Assurance (DMQA) team, Providers\* |
| To what extent do providers perform cancer screening and diagnostic services? | Implementation of screening and diagnostic services | No. and % of breast and cervical screening, re-screening and diagnostic services provided | Quantitative | Patient-level clinical data (Minimum Data Elements, or MDEs) | Providers\* |
| To what extent do navigators and/or program staff perform patient navigation, EBIs, and supportive activities? | Implementation of patient navigation, EBIs and supportive activities | No. and types of EBIs implemented; no. and types of barriers identified and reduced; no. of navigator contacts with clients; no. of patients receiving client reminders/recalls; no. of provider assessment and feedback performed | Quantitative Qualitative | Provider§ assessment survey, health system (HS) EBI implementation plan, HS assessment interview, HS data, Patient Navigator (PN) intake data | Program Evaluator, Providers§, HS staff, ACS PN team |

*\*Providers include the GDPH health districts, local health departments and other providers funded by the GBCCP (e.g., FQHCs, other health systems). §Providers include the GDPH health districts, local health departments and other providers funded by the GBCCP, except for new partner health systems that implement EBIs. The GBCCP will assess health systems more rigorously by conducting baseline health system assessment interview, reviewing health system data, and collecting clinic-level data.*

**Table 3**. Summary of data collection plan for outcome evaluation

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Evaluation Question** | **Indicator** | **Performance Measure** | **Method** | **Data Source** | **Responsibility** |
| Is the GBCCP meeting target values of clinical quality indicators? | Appropriate B & C cancer screening among priority populations; timely and appropriate diagnostic follow-up and cancer treatment referral among priority populations | % of initial Pap tests provided to women never screened for cervical cancer (Goal: ≥20%); % of screening mammograms provided to women ≥50 years (Goal: ≥75%); % of abnormal breast cancer screening results with complete follow-up (Goal: ≥90%); % of abnormal cervical cancer screening results with complete follow-up (Goal: ≥90%); % of abnormal breast screening results with time from screening test result to final diagnosis >60 days (Goal: ≤25%); % of abnormal cervical screening results with time from screening to final diagnosis >90 days (Goal: ≤25%); % of final diagnosis of breast cancer where treatment has been started (Goal: ≥90%); % of final diagnosis of HSIL, CIN2, CIN3/CIS, or invasive cervical cancer where treatment has been started (Goal: ≥90%); % of women diagnosed with breast cancer with time from date of diagnosis to treatment started >60 days (Goal: ≤20%); % of women diagnosed with premalignant high-grade cervical lesions with time from date of diagnosis to treatment started >90 days (Goal: ≤20%); % of women diagnosed with invasive cervical cancer with time from date of diagnosis to treatment started >60 days (Goal: ≤20%) | Quantitative | Patient-level clinical data (MDEs) | Providers\* |
| What percentage of patients receiving navigation for diagnostic follow-up complete diagnostic testing? | Appropriate diagnostic follow-up among priority populations | % of patients receiving navigation for diagnostic follow-up complete diagnostic testing | Quantitative | PN intake data | ACS PN team |
| Do clinic-level screening rates change after implementing EBIs and supportive activities? | Appropriate B & C cancer screening | Clinic-level breast cancer screening rate, clinic-level cervical cancer screening rate | Quantitative | Clinic-level data | HS staff, Program Evaluator |

*\*Providers include the GDPH health districts, local health departments and other providers funded by the GBCCP (e.g., FQHCs, other health systems).*

1. **Analysis and interpretation**

**6.1 Data analysis:** The GBCCP evaluator will compile, clean, code, and analyze data from multiple data sources described in ‘5. Data collection’ section. Both quantitative and qualitative data analysis will be performed.

Survey data will be exported into Microsoft Excel and SAS (Version 9.4) to conduct the descriptive data analysis, including frequencies and percentages, and chi-square tests. Some key outcome variables will be stratified by demographics, such as age, race/ethnicity and region. Pre- and post-test survey data will be analyzed by performing descriptive data analysis, t-tests and McNemar’s tests. Rates related to breast and cervical cancer screening, rescreening, incidence and mortality will be calculated by following the CDC standards.

Qualitative data, including responses to open-ended questions in survey data and interview data, will be analyzed by performing thematic analysis. The evaluator will create a codebook, identify codes based on the qualitative responses, and assess common themes.

**6.2 Data interpretation:** Upon completion of preliminary data analysis, the GBCCP evaluator will present and discuss the initial evaluation findings with the Principal Investigator, Program Manager, other GBCCP staff and the Evaluation Stakeholder Work Group to interpret the results and apply context to analysis of evidence gathered. Involving relevant stakeholders in data interpretation process will facilitate the program staff to draw appropriate, meaningful and data-based conclusions and ensure credibility and acceptability of evaluation findings. Evaluation findings will be interpreted by considering the programmatic goals, evaluation goals, social and political context of the program and needs of program stakeholders.

**6.3 Contribution to collaborating with health systems and communities:** Through triangulation of multiple data sources, the evaluator will summarize activities completed by the program staff, and highlight the program progress, successes, challenges, outcomes, and lessons learned. Evaluation findings on facilitators and challenges of implementing strategies and activities related to health systems changes (i.e., screening and patient navigation) and community-clinical linkages in Georgia will enhance our understanding of the advantages and challenges of working collaboratively with health systems and communities to promote breast and cervical cancer screening.

1. **Dissemination and use of evaluation findings**

**7.1 Use of findings:** The GBCCP evaluator will collaborate with the Principal Investigator, the GBCCP staff and stakeholders to ensure the use of evaluation findings for continuous quality improvement. The evaluator will work collaboratively with the program staff to identify targeted recommendations and action steps and make data-based decisions, so that responsible staff can implement programmatic changes to enhance program quality, effectiveness and efficiency. The CDC Project Consultant and Evaluation Technical Advisor will have access to evaluation findings and participate in consensus building exercises and planning discussion if major programmatic changes are recommended.

**7.2 Dissemination of findings:** Evaluation findings will be disseminated to program stakeholders through various channels, such as local, statewide and national conferences, meetings, evaluation reports, the GDPH website, peer-reviewed journals, evaluation briefs and the GDPH weekly newsletter. Bi-annual progress reports and annual evaluation reports that include evaluation results and success stories about program strategies, challenges, outcomes and lessons learned will be disseminated to program staff and the CDC. Program progresses and challenges will be communicated with the CDC Project Consultant during quarterly technical assistance calls. The GBCCP team will present the evaluation findings to other state NBCCEDPs and local, state, and national level stakeholders through webinars and conference calls. This comprehensive program evaluation and performance measurement will contribute to developing an evidence base in cancer care and prevention field. Throughout the project duration, the GBCCP evaluator will submit abstracts to academic and professional conferences about following topics: implementation and effectiveness of evidence-based interventions for increasing breast and cervical cancer screening rates at FQHCs and local health departments in Georgia; and promoting breast and cervical cancer screening through client navigation in Georgia. Audience, format and channel of dissemination, and responsible staff involved in dissemination are described in **Table 4.**

**Table 4.** Dissemination plan

|  |  |  |
| --- | --- | --- |
| **Audience** | **Format and Channel** | **Responsibility** |
| GBCCP staff | Monthly in person updates on data collection and preliminary findings | Program data manager, Program evaluator |
| In person PowerPoint presentation of evaluation findings, including feedback and action steps | Program evaluator |
| Email evaluation report upon completion | Program evaluator |
| CDC Program Consultant and evaluation staff | Email evaluation report upon completion | Program evaluator,  Program director |
| GDPH Health Districts and other participating providers | In person PowerPoint presentation of evaluation findings | Program evaluator |
| PowerPoint presentation of evaluation findings via webinar and teleconference | Program evaluator |
| Email evaluation report upon completion | Program evaluator |
| Evaluation Stakeholder Work Group | PowerPoint presentation of evaluation findings via webinar and teleconference | Program evaluator |
| Email evaluation report upon completion | Program evaluator |
| GDPH Chronic Disease Prevention Section leadership and relevant program staff | Email evaluation report upon completion | Program evaluator |
| Program stakeholders and general public | Upload evaluation report on GDPH Website | Program evaluator |

**7.3 Documenting and monitoring audience feedback and action steps:** The GBCCP evaluator will document, monitor and analyze feedback from various program staff and stakeholders and develop action steps for continuous quality improvement. A centralized Excel spreadsheet entitled “audience feedback and action steps” will be developed and monitored. Feedback from internal program staff, external partners and other stakeholders from various data sources, such as training and meeting evaluation surveys, meeting minutes, requests for technical assistance from program staff, providers and/or partners, conference calls with the CDC program consultant or the CDC evaluator, will be compiled and updated monthly. Audience feedback, action steps planned, and action steps taken will be documented in this spreadsheet. The evaluator will monitor and analyze this “audience feedback and action steps” spreadsheet quarterly.

1. **Evaluation timeline**

Timeline of evaluation activities that will be performed during this project period is outlined in **Table 5.**

**Table 5.** Timeline for evaluation activities

|  |  |
| --- | --- |
| **Time frame** | **Evaluation Activities** |
| Monthly Tasks:  July 2017 – June 2022 | Collect MDE data, PN intake/activity data and success stories; document meeting notes, feedback/action steps; perform monthly data review; each program staff report on their progress and barriers/facilitators to implementation at monthly staff meeting |
| Quarterly Tasks:  July 2017 – June 2022 | Collect data (e.g., pre-/post-tests) and quarterly reports submitted from providers; analyze/synthesize data and quarterly reports; and monitor site visits; and monitor and analyze audience feedback and action steps |
| Year 1 1st and 2nd Quarters:  July – December 2017 | Developed/disseminated annual performance report to CDC; engaged program stakeholders in developing evaluation plan; collected annual update and training meeting evaluation survey data, and analyzed/ disseminated meeting evaluation report to program staff; revised/finalized evaluation and performance measurement plan; and adapted/developed data collection instruments |
| Year 1 3rd Quarter:  January – March 2018 | Submit evaluation/performance measurement plan to CDC; develop instruments; collect data; and submit progress report/Year 2 continuing application to CDC |
| Year 1 4th Quarter:  April – June 2018 | Submit MDE data and baseline clinic data to CDC; and collect data (e.g., provider assessment survey, pre-/post-tests, etc.) |
| Year 2 1st Quarter:  July – September 2018 | Review workplans submitted from providers; develop/disseminate annual evaluation report to CDC/stakeholders; and adapt/develop data collection instruments |
| Year 2 2nd Quarter:  Oct. – Dec. 2018 | Submit MDE data to CDC; collect annual update and training meeting evaluation survey data, and analyze/disseminate meeting evaluation report to program staff |
| Year 2 3rd Quarter:  January – March 2019 | Collect and submit annual clinic data to CDC; develop/submit progress report/Year 3 continuing application to CDC |
| Year 2 4th Quarter:  April– June 2019 | Submit MDE data and baseline clinic data to CDC; collect data (e.g., provider assessment survey, pre-/post-tests, etc.) |
| Year 3 1st Quarter:  July – September 2019 | Review workplans submitted from providers; and develop/disseminate annual evaluation report to CDC/stakeholders |
| Year 3 2nd Quarter:  Oct. – Dec. 2019 | Submit MDE data to CDC; collect annual update and training meeting evaluation survey data; and analyze/disseminate meeting evaluation report to program staff |
| Year 3 3rd Quarter:  January – March 2020 | Collect and submit annual clinic data to CDC; develop/submit progress report/Year 4 continuing application to CDC |
| Year 3 4th Quarter:  April – June 2020 | Submit MDE data and baseline clinic data to CDC; collect data (e.g., provider assessment survey, pre-/post-tests, etc.) |
| Year 4 1st Quarter:  July – September 2020 | Review workplans submitted from providers; and develop/disseminate annual evaluation report to CDC/stakeholders |
| Year 4 2nd Quarter:  Oct. – Dec. 2020 | Submit MDE data to CDC; collect annual update and training meeting evaluation survey data; and analyze/disseminate meeting evaluation report to program staff |
| Year 4 3rd Quarter:  January – March 2021 | Collect and submit annual clinic data to CDC; and develop/submit progress report/Year 5 continuing application to CDC |
| Year 4 4th Quarter:  April– June 2021 | Submit MDE data and baseline clinic data to CDC; collect data (e.g., provider assessment survey, pre-/post-tests, etc.) |
| Year 5 1st Quarter:  July– September 2021 | Review workplans submitted from providers; develop/disseminate annual evaluation report to CDC/stakeholders |
| Year 5 2nd Quarter:  Oct. – Dec. 2021 | Submit MDE data to CDC; Collect annual update and training meeting evaluation survey data, and analyze/disseminate meeting evaluation report to program staff |
| Year 5 3rd Quarter:  January – March 2022 | Collect and submit annual clinic data to CDC; and develop/submit progress report/competitive application to CDC |
| Year 5 4th Quarter:  April – June 2022 | Submit MDE data and baseline clinic data to CDC; and collect data |

**Appendix**

**Table 6.** Data collection plan in detail

|  |  |  |  |
| --- | --- | --- | --- |
| **Indicator/Performance Measure** | **Data Source** | **Assessment Frequency** | **Responsibility** |
| Facilitators and barriers in program implementation, plans to reduce barriers | Meeting notes, grantee workplans, reports, site visits | Quarterly annually | Program Director (PD), Data Management/Quality Assurance (DMQA) team, Providers\* |
| Training needs for staff/providers\*; technical assistance needs for staff/providers\* | Meeting notes, grantee workplans, reports, site visits, training needs assessment | Quarterly annually | PD, DMQA team, Providers\* |
| Implementation of EBIs among participating providers§ | Provider§ assessment survey | Annually | Program Evaluator, Providers§ |
| Number of navigator contacts with clients; number of clients receiving client reminders and recalls for mammography and Pap test; % of patients receiving navigation for diagnostic follow-up complete diagnostic testing; number and % of breast and cervical screening completed among navigated women; type and number of reduced barriers to cancer care | Patient Navigator (PN) intake data | Monthly annually | ACS PN team |
| Clinic-level breast/cervical cancer screening rates; health system (HS) and clinic characteristics; demographics; clinic partnership; implementation of EBIs, patient navigation, and supportive community clinical linkages activities | Clinic-level data | Baseline annually | HS staff, Program Evaluator |
| Current HS environment; intervention needs; intervention selected; resources and barriers in program implementation | HS EBI implementation plan, HS assessment interview, HS data review | Baseline | HS staff, Program Evaluator |
| Number of participants of group/one-on-one education about breast/cervical cancer; number of group education sessions provided at worksites; number of eligible female employees who participated in worksite education and received the GBCCP screening | PN activity data | Monthly annually | ACS PN team |
| % of navigated women with improved knowledge/attitude/satisfaction about breast/cervical cancer screening | Patient satisfaction survey | Annually | ACS Evaluator, Volunteers |
| % of participants in worksite education with improved knowledge about cancer screening | Pre- and post-test for worksite education | Annually | ACS PN team |
| % of participants in Cancer Cooking School with improved intention to engage in healthy diet and physical activity | Cancer Cooking School report | Annually | UGA Cooperative Extension staff |
| Number of high quality staff/providers recruited and retained | Performance evaluation | Annually | PD |
| % of initial Pap tests provided to women never screened for cervical cancer (Goal: ≥20%); % of screening mammograms provided to women ≥50 years (Goal: ≥75%); Number and % of breast and cervical screening and re-screening provided | Patient-level clinical data (Minimum Data Elements, or MDEs) | Monthly bi-annually | Providers\* |
| % of abnormal breast screening results with complete follow-up (Goal: ≥90%); % of abnormal cervical screening results with complete follow-up (Goal: ≥90%) |
| % of abnormal breast screening results with time from screening test result to final diagnosis >60 days (Goal: ≤25%); % of abnormal cervical screening results with time from screening to final diagnosis >90 days (Goal: ≤25%) |
| % of final diagnosis of breast cancer where treatment has been started (Goal: ≥90%); % of final diagnosis of HSIL, CIN2, CIN3/CIS, or invasive cervical cancer where treatment has been started (Goal: ≥90%) |
| % of women diagnosed with breast cancer with time from date of diagnosis to treatment started >60 days (Goal: ≤20%); % of women diagnosed with premalignant high-grade cervical lesions with time from date of diagnosis to treatment started >90 days (Goal: ≤20%); % of women diagnosed with invasive cervical cancer with time from date of diagnosis to treatment started >60 days (Goal: ≤20%) |
| % of providers with improved knowledge of performing breast and cervical cancer examinations; % of providers with improved knowledge about breast and cervical cancer screening guidelines | Pre- and post-test for Women’s Health Exam (WHE) trainings & WHE refresher trainings | Quarterly | Nurse Consultants (NCs) |
| Number and types of health system partnerships with participating providers | Memorandum of Understandings, grantee workplans, reports, PN activity data | Quarterly annually | PD, Program Evaluator, NCs, ACS PN team |
| Stories about navigated patients who completed plan of cancer care | PN success stories | Monthly annually | ACS PN team |
| GBCCP data accuracy rate (Goal: ≥98%), Timely GBCCP data submission rate (Goal: ≥75%), PN data accuracy rate (Goal: ≥95%), PN data completeness rate (Goal: ≥90%) | Patient-level clinical data (MDEs), PN data error/completion reports | Monthly bi-annually annually | Program Data Manager, ACS PN Data Manager |
| % of women self-reporting receipt of breast cancer screening based on current guidelines; % of women self-reporting receipt of cervical cancer screening based on current guidelines | Behavioral Risk Factor Surveillance System data | Annually | Program Epidemiologist |
| Breast and cervical cancer incidence and mortality among targeted populations; Breast and cervical cancer incidence and mortality by race/ethnicity and region | Cancer registry, cancer death clearance data | Annually | Program Epidemiologist |

*\*Providers include the GDPH health districts, local health departments and other providers funded by the GBCCP (e.g., FQHCs, other health systems). §Providers include the GDPH health districts, local health departments and other providers funded by the GBCCP, except for new partner health systems that implement EBIs. The GBCCP will assess health systems more rigorously by conducting baseline health system assessment interview, reviewing health system data, and collecting clinic-level data.*

Data sources, data standards and plans for storage, access, archival and preservation are summarized in **Table 7**. All released data will have accompanying data dictionary and appropriate documentation that describes the data collection method and potential limitations for usage of the data. For public use, de-identified datasets, data dictionary and relevant documentation will be saved in the GDPH file server to provide access to the data. Data that cannot be de-identified will be provided on request under a data-use agreement.

**Table 7.** Data Management Plan

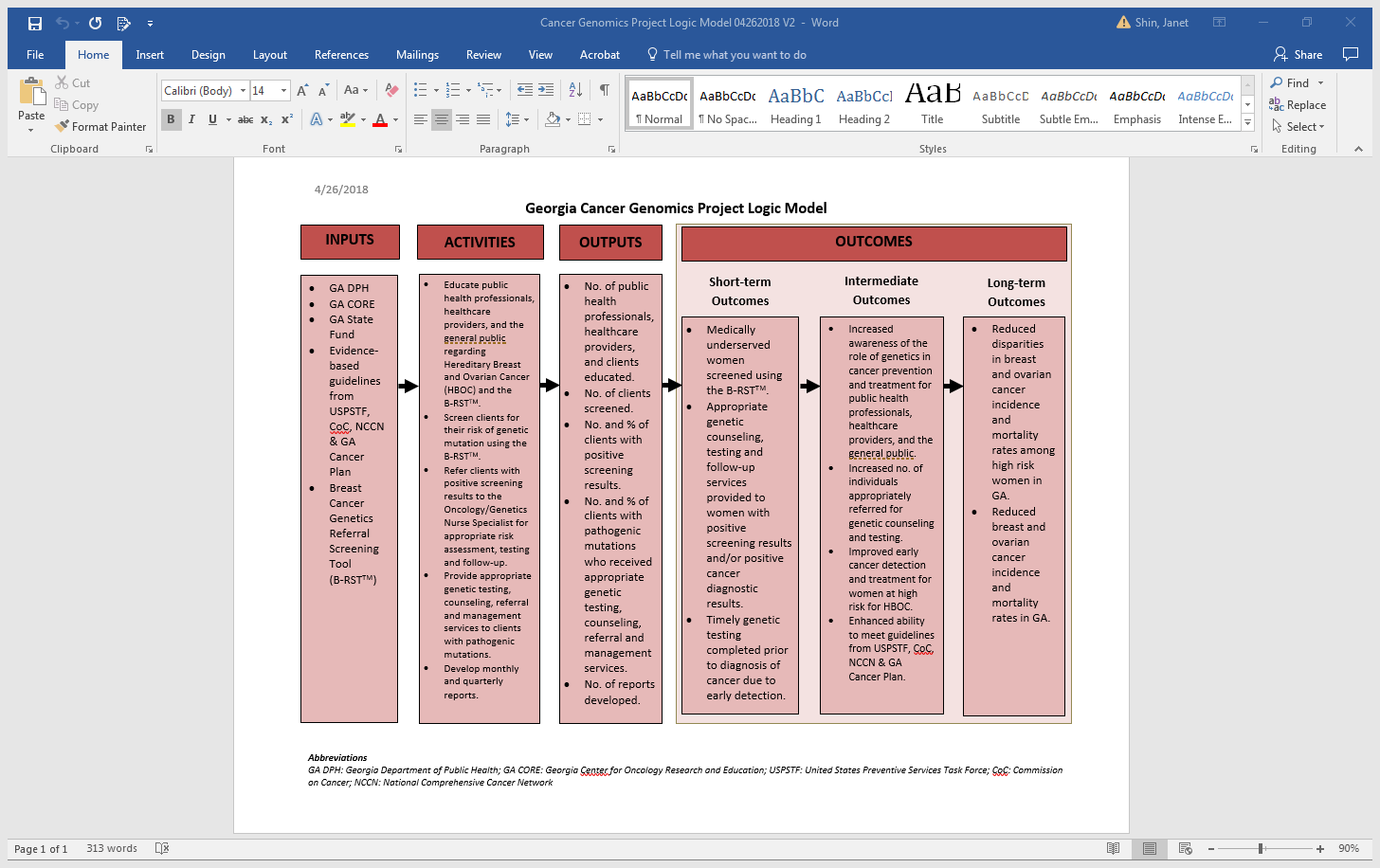
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| --- | --- | --- | --- | --- |
| **Data Sources** | **Standards** | **Storage** | **Access** | **Archival and Preservation Plan** |
| NBCCEDP Minimum Data Elements (MDEs), patient-level clinical data from providers | MDE definition and data quality indicators | Stored in the GDPH file server in compliance with HIPAA regulations. | The GBCCP database can be accessed by the GBCCP state staff only. Aggregated data reports are shared with the program staff at all levels. | Electronic records: stored in the GDPH file server indefinitely  Paper records: stored in the state office for 3 years, and stored in the state archive center for 2 years |
| Pre- and post-test survey for Women’s Health Exam (WHE) trainings and WHE refresher trainings, provider assessment survey, health system assessment interview | Data dictionary created by the GBCCP evaluator | Stored in the GDPH file server in compliance with HIPAA regulations  All survey and interview data will have participant names and contact information removed, with a unique identifier allowing linkage if the need arises while maintaining confidentiality. |
| Clinic data collection form from health systems | Data dictionary provided by the CDC | Stored in the GDPH file server and the Breast and Cervical Baseline and Annual Reporting System (B&C-BARS) in compliance with HIPAA regulations | Clinic data can be accessed by the GBCCP state staff and responsible health system staff only. | Stored in the GDPH file server indefinitely |
| ACS Patient Navigator (PN) Intake Database, ACS PN Activity Database, ACS Patient Satisfaction Survey, PN Success Stories | Data dictionary created by the ACS evaluator | Stored on shared drive  Compliant with HIPAA, the GDPH privacy and security requirements ACS PNs complete training about HIPAA, the GDPH and the ACS privacy and security policies bi-annually | The ACS shared drive has restricted access to the PNs, ACS data manager and PNP manager | Stored in the ACS archive shared drive for 7 years |

**Data access**

* The GBCCP identifiable patient-level clinical data are not designated for public use and can be accessed by the GBCCP state staff with appropriate access rights only.
* De-identified datasets are provided when data requests are received through and approved by the GDPH data request system.
* Aggregated screening and diagnosis data reports for program management, performance monitory funding tracking are shared with the program staff at all levels and public upon request.
* The data are stored in the GBCCP database in the GDPH file server in compliance with HIPAA regulations and the GDPH information security policies. The GBCCP state staff are required to attend refresher information security training and follow all protocols for receiving, storing, editing and sharing data.

**Data archiving and long-term preservation**

* All identifiable patient-level data collected from the providers electronically or in paper forms are entered in the GBCCP database. The database, with its documentations is stored in the GDPH file server indefinitely. The GBCCP data management team supports the data through changing technologies, new media, and data formats.
* The electronic data files from the providers are stored in the GDPH file server indefinitely.
* Based on the GA state government records retention requirements, paper records from the providers are stored for 5 years: 3 years in the state office, and 2 years in the state retention center.



**Figure 2.**