Petition to the State Health Coordinating Council
Proposed SMFP Policy TE-5: Plan Exemption for Linear Accelerators for Cancer Center Hospitals
for the 2026 State Medical Facilities Plan
March 5, 2025

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Statement of Requested Adjustment

Summary

WakeMed proposes that the State Health Coordinating Council (SHCC) develop and approve a policy allowing certain cancer/oncology programs/centers that do not have a linear accelerator (LINAC) to obtain a certificate of need to acquire one without requiring a need determination in the service area in the annual State Medical Facilities Plan (SMFP). The new policy would be adopted for inclusion in the 2026 SMFP.

The rationale for this proposal is similar to that for Policy TE-3, which was first included in the 2023 SMFP. Policy TE-3 allows acute care hospitals with 24-hour emergency care, that do not have currently have a fixed magnetic resonance imaging (MRI) scanner, to seek CON approval to obtain one without a need determination in the annual SMFP. Access to, and use of, MRI technology is standard of care for such facilities. While an in-house LINAC is not a standard of care for every hospital or every cancer program, it is a standard of care for a cancer center that already offers inpatient and outpatient medical and surgical oncology services and serves at least 5,000 annual patient encounters a year.

The new policy, which would be designated Policy TE-5, would be worded as follows:

Policy TE-5: Plan Exemption for Linear Accelerators in Cancer Center Hospitals

An applicant proposing to acquire a linear accelerator (LINAC) under this policy shall demonstrate in its certificate of need (CON) application that:

1. *It offers a cancer program that provides both inpatient and outpatient medical and surgical oncology services, including documentation that it served at least 5,000 annual encounters in the last 12 months prior to submission, employs cancer staff that includes at least two (2) Board-certified medical oncologists that participate in multidisciplinary Tumor Boards, and maintains an active Tumor Registry;*

2. *The proposed LINAC will not be located at a site where the inventory in the SMFP reflects that there is an existing LINAC or a CON awarded for a LINAC that was obtained in the five years immediately preceding the filing of the CON application;*

3. *It does not, directly or through a related entity, have an awarded or non-operational LINAC located in the proposed service area;*

4. *It has identified at least two (2) radiation oncologists who will be employed by the applicant to provide services for patients utilizing the proposed LINAC;*

5. *It will have physics and dosimetry staffing levels that meet American College of Radiology personnel standards for Radiation Oncology LINAC services;* [1]

6. *It will meet standards of the American Society for Radiation Oncology (ASTRO) for safety and quality;*

7. *It has or will have a LINAC simulator located in the same building as the proposed LINAC;*

8. *If one or more LINACs are located in the applicant's service area, the average annual utilization across all operational LINACs in the service area is at least 4,500 ESTVs;*

9. *The proposed LINAC's utilization will reach at least 6,750 ESTVs by the third project year; and*

10. *It is a licensed North Carolina acute care hospital that its Certified by the Center for Medicare and Medicaid Services and has an active, published charity care program at the time of the application.*

Reasons for the Proposed Adjustment

Background Information - CON Statute and SMFP

N.C.G.S. § 131E-176 (14g) defines a linear accelerator as "a machine used to produce ionizing radiation in excess of 1,000,000 electron volts in the form of a beam of electrons or photons to treat cancer patients." Radiation therapy using a linear accelerator ("LINAC") is a common treatment for many types of cancers, as well as some benign tumors. The National Cancer Institute defines "standard of care" as "[t]reatment that is accepted by medical experts as proper treatment for a certain type of disease and that is widely used by health care professionals…"[1,2] Radiation oncology – which requires a LINAC for all but a narrow range of brachytherapy treatment, is the standard treatment for approximately 50 percent of patients at some time during their cancer care.[3] The other major cancer treatments involve medical oncology, surgery, and brachytherapy.

In 2022, the State Health Coordinating Council (SHCC), in evaluating and ultimately approving a petition from WakeMed for an Adjusted Need Determination for a LINAC in Service Area 20 in the 2023 SMFP, noted that the use of LINAC technology is the standard of care for cancer treatment. In 2023, the SHCC

[1] If approved, the ACR staffing standards will appear in Chapter 15 of the 2026 SMFP; https://accreditationsupport.acr.org/support/solutions/articles/11000049781-personnel-radiation-oncology-revised-7-9-2024
[2] National Cancer Institute. Standard of Care Definition.
[3] https://www.cancer.org/cancer/managing-cancer/treatment-types/radiation/basics.html

approved a similar petition submitted by FirstHealth of the Carolinas to include an adjusted need for a LINAC in Service Area 17 in the 2024 SMFP on the same basis.

Currently, the prerequisite to the acquisition of a new LINAC is a need determination in the SMFP. The LINAC need methodology found in SMFP Chapter 15 is based on the number of procedures performed in each of the state's 28 LINAC service areas, historic patient origin, and prior year population. The methodology evaluates the service areas annually to ascertain whether the any service area should be divided to accommodate a county that has reached 120,000 residents. The service areas have remained unchanged for several years.

In 2025, 132 approved linear accelerators serve patients in a total of 72 facilities located across 54 of North Carolina's 100 counties. One LINAC is in the state's planning inventory currently under appeal. In 2023, LINACs in North Carolina performed an average of 4,925 procedures, ranging from 1,700 procedures per unit in Service Area 1 to 6,853 procedures per unit in Service 19, as North Carolina License Renewals define ESTVs. However, NC-defined ESTVs no longer account for all procedures done on a LINAC. Attachment 1 provides the listing of facilities with LINACs, with average ESTV utilization by service area, excerpted from Chapter 15 of the 2025 SMFP.

The 2025 SMFP does not provide ownership information for facilities that operate LINACs. Among the existing facilities, 58 are hospital-based, hospital-owned or hospital-affiliated (i.e., bear a hospital name); and 14 are freestanding (i.e., do not bear a hospital name). Twelve of the freestanding facilities are part of GenesisCare (North Carolina Radiation Therapy Management). The remaining freestanding facilities are Lake Norman Radiation Oncology and Matthews Radiation Oncology. These two facilities are part of the Southeastern Radiation Oncology ("SERO") network, as are some other facilities in the larger Charlotte metropolitan area that bear hospital names.

Table 1 shows the LINAC need determinations for the past seven SMFPs. Each service area with a need was allocated one unit of LINAC equipment. Of the last six need determinations, two resulted from the standard methodology. The remaining four were based on petitions for Adjusted Need Determinations.

Table 1: Linear Accelerator Need Determinations, 2019-2025

SMFP	Service Area	Description
2019	18	2018 Petition for Adjusted Need Determination
2020	NA	No need determination
2021	19	Need determination from standard methodology
2022	7	Need determination from standard methodology
	24	2021 Petition for Adjusted Need Determination
2023	20	2022 Petition for Adjusted Need Determination; *CON decision currently under appeal*
2024	17	2023 Petition for Adjusted Need Determination
2025	NA	No need determination

Discussion

The terms "cancer center," "cancer program," "oncology center," and "oncology program" are often used to describe the types of settings that would be likely to provide radiation therapy treatment using a LINAC. However, neither the SMFP, CON regulations, nor the CON Statute define these terms or describe the types of facilities or settings eligible to provide LINAC treatment.

The American College of Surgeons' (ACS) Commission on Cancer (CoC) accredits 11 different types of cancer programs; not all of which are appropriate for a LINAC. These definitions are provided in Attachment 2. This accreditation is important, but the categories are too broad to distinguish which facilities truly need a linear accelerator.

The Agency has no data on the proportion of cancer patients that receive radiation therapy treatment in linear accelerators.

The standard need methodology in Chapter 15 is based on utilization of existing LINACs and does not address service gaps in the State's cancer program.

The proposed Policy TE-5 concerns individual facilities; it would not require changes to the SMFP's linear accelerator service areas.

Statement of Adverse Effects on Providers and Consumers if the Adjustment is Not Made

Undeveloped Linear Accelerators Can Depress SMFP Need

Access to LINAC equipment is not evenly distributed statewide. Attachment 3 shows how the state's LINAC inventory is distributed and illustrates the significant differences in per-capita access among the service areas.

Need in the SMFP is based on utilization of existing LINACs. In this structure, undeveloped and non-operational LINACs artificially depress the need that results from the standard methodology. For example, Service Area 20 alone has three awarded LINAC CONs that are not developed. One unit is over ten years old. One could continue under appeal for years.

- 2014 Service Area 20 LINAC - now assigned to UNC Rex Holly Springs Hospital;
- 2022 Franklin County Cancer Center – approved for relocation to Duke Green Level Hospital;
- 2023 Service Area 20 LINAC - awarded to WakeMed; appealed.

Even with the undeveloped CONs included in its planning inventory, Service Area 20, which includes Wake County, has the highest population among LINAC service areas but consistently ranks among the lowest in the state for LINACs per 100,000 population. Please see Attachment 3. In 2023, Service Area 20's ratio of LINACs per 100,000 was lower than all but 5 service areas.

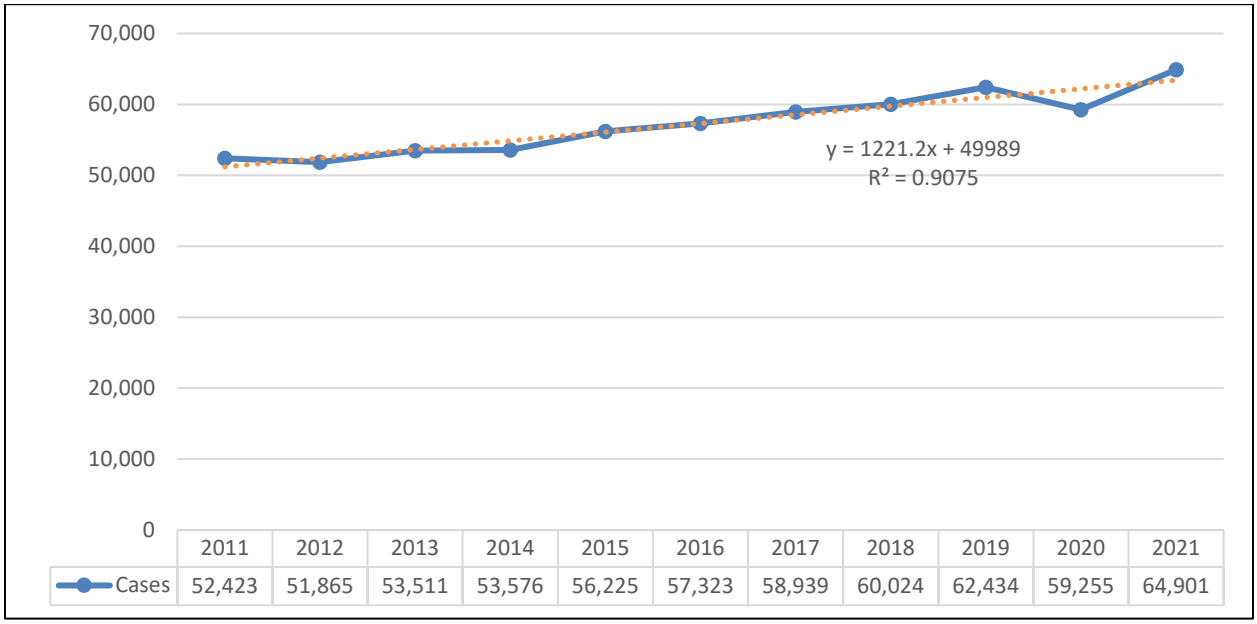
LINAC Need Methodology Not Keeping Up with Cancer Diagnoses

Data from the North Carolina Central Cancer Registry (CCR) show that cancer incidence and cancer rates are increasing statewide. These data go one year farther and reflect a different pattern from what the Agency presented to the SHCC a year ago.

Figure 1 below shows the incidence of new cancer diagnoses in North Carolina for the most recent eleven years for which final data are available from the CCR. In North Carolina, like most other states, all health care providers are required by law to report cases to a central cancer registry, but the primary data source is hospitals that have accredited cancer programs. For cases that are not reported by the hospitals' cancer registries, the CCR supplements data with reports from physician offices, freestanding treatment centers and clinics, pathology laboratories and other sources.

Except for 2020, cancer incidence in the state has been steadily increasing since 2011, with 2021 incidence higher than 2019. It is possible that the COVID-19 pandemic affected new diagnoses (or their reporting) in 2020. Therefore, the downturn may not be the beginning of a trend.

Figure 1: Cancer Incidence in North Carolina, 2011-2021



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Cases	52,423	51,865	53,511	53,576	56,225	57,323	58,939	60,024	62,434	59,255	64,901

Source: Cancer Statistics by Year, North Carolina Central Cancer Registry, State Center for Health Statistics

While rates have been relatively stable over time, the number of cancer cases in 2021 was the highest recognized since 2011. Reasons may include some lag associated with the COVID-19 pandemic. However, other reasons are also emerging, including the following:

- Rates of Gastrointestinal (GI) cancer are increasing among persons in their 40s and 50s.[4] This was highlighted in a recent email to members of the American Cancer Society, which noted the trend with alarm.

- Cancer survival rates are increasing, and the number of cancer survivors continues to grow, from 3.5 million in the 1970s to over 17 million today. According to the National Cancer Institute, nearly one in five cancers diagnosed today occurs in a person with a previous diagnosis of cancer.[5] These "second primary cancer" cases may result from previous radiotherapy or chemotherapy, environmental and medical history factors, or genetic factors. When diagnosed and treated early, much of this cancer can be identified and successfully treated.

When the SMFP first introduced a LINAC need methodology, cancer mortality was high. Today, with improved diagnosis and treatment modalities, survival rates are increasing. That success comes with more secondary and tertiary cancers which increase demand for medical, surgical and radiation therapy treatments.

Statement of Adverse Effects on Providers and Consumers if the Adjustment is Not Made

Limited supply of LINACs puts low-income persons, as well people who live farther away from existing LINACs at the end of the schedule. As a result, clinicians are seeing advanced cancers in this population that would have higher survival rates, and less damage, if diagnosed and treated earlier.

Hospitals that care for medically underserved groups and offer a full medical and surgical cancer program, but which cannot develop LINAC services, perpetuates a fragmented system of care that forces all of its radiation oncology LINAC patients to seek treatment at multiple facilities. In essence, these hospitals must tell one-half of their patients to go elsewhere to complete their full course of treatment. This adds enormous burden to every cancer patient. The burden on patients who are the primary source of income for their families is particularly onerous.

Statement of Alternatives Considered and Found Not Feasible

Any LINAC need determination in the annual SMFP is subject to competitive certificate of need applications and potentially lengthy appeals. This has occurred in all major urban counties and is independent of whether the need is generated by a petition or by the standard methodology. Petitions provide no assurance that the petitioner will be awarded a CON. In fact, a petition can result in years of appeals if more than one party competes for the opportunity.

The LINAC standard need methodology has not been updated in many years and may be warranted. However, doing so would require formation of a work group to study the methodology and recommend changes, which would be arduous and time-consuming for Agency staff.

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[4] Harrold, Emily, *et al*, "Early-Onset GI Cancers: Rising Trends, Genetic Risks, Novel Strategies, and Special Considerations", American Society of Clinical Oncology Educational Book, Volume 43, https://doi.org/10.1200/EDBK_398068.

[5] Source: National Cancer Institute, https://dceg.cancer.gov/research/what-we-study/second-cancers

Evidence of No Unnecessary Duplication of Services

The proposed Policy will permit limited, but important increase in LINAC inventory. It significantly limits qualified applicants to acute care hospitals that have demonstrated commitment to medically underserved people, a significant cancer program, and capacity to meet ACR and ASTRO quality standards for LINACs. It provides an important mechanism to adjust for chronically underused LINAC capacity without introducing excess capacity.

Evidence of Consistency with SMFP

In the past, the SHCC has adjusted other services to account for underused capacity – specifically acute care hospital beds and nursing facility beds. The proposed Policy TE-5 is also consistent with the Basic Governing Principles found in Chapter 1 of the SMFP.

SMFP Basic Governing Principles

1. Safety and Quality

An excerpt from this Principle states:

> *The SHCC recognizes that while safety, clinical outcomes and satisfaction may be conceptually separable, they are often interconnected in practice. The North Carolina State Medical Facilities Plan should maximize all three elements.*

The American Society for Radiation Oncology (ASTRO) is a professional organization whose mission is to advance the practice of radiation therapy and is the world's largest radiation oncology society with over 10,000 members. ASTRO strives to improve patient care through professional education and training, and by advancing health policy standards. ASTRO's APEx – Accreditation Program for Excellence® recognizes facilities that deliver safe, high-quality care to patients, and addresses:

- Patient Evaluation, Care Coordination and Follow-Up;
- Treatment Planning;
- Patient-Specific Safety Interventions and Safe Practices;
- Defined Staffing Roles;
- Staff Qualifications and Training;
- Radiation Safety;
- Emergency Preparation and Planning;
- Facility And Equipment;
- Patient Education.[6]

Proposed Policy criteria 1, 5, 6 and 8 address the provision of radiation therapy services that meet externally recognized safety and quality standards.

[6] https://www.astro.org/practice-support/accreditation

2. Access

This Basic Principle notes:

> *"…The first priority is to ameliorate economic barriers, and the second priority is to mitigate time and distance barriers.*
>
> *"…The SHCC planning process will promote access to an appropriate spectrum of health services at a local level, whenever feasible under prevailing quality and value standards."*

The proposed Policy seeks to increase access to radiation therapy services by providing cancer programs that do not currently have a LINAC with means obtain a certificate of need to acquire a unit of LINAC equipment. As described above and demonstrated in Attachment 3, many urban counties are in LINAC service areas that rank near the bottom for LINACs per 100,000 population. Policy TE-5 would not result in a proliferation of linear accelerator equipment, as qualified CON applicants would already provide cancer services to a significant number of patients and be required to satisfactorily demonstrate need.

Proposed Policy criteria 1, 2, 4, and 10 specifically address access.

3. Value

This Basic Principle notes:

> *"The SHCC defines health care value as the maximum health care benefit per dollar expended.*
>
> *"…Cost per unit of service is an appropriate metric.*

Proposed Policy criteria 2, 3 and 9 address value.

By establishing boundaries on Qualified Applicants, but not restricting the setting to hospital-based billing, proposed Policy TE-5 permits applicants to determine locally the best value proposition.

As North Carolina and the nation continue to move toward implementation of population health management, value-based care, and whole-person care, it is imperative that health systems have the necessary diagnostic and therapeutic tools, which are now standard-of-care, to effectively treat patients in a cost-effective manner. Health systems must have a full continuum of care to treat and manage all aspects of disease. Third-party payers, including Medicaid, seek to contract with providers that can control costs while ensuring high quality care. When patients must access care through different health systems, health care costs cannot be monitored or controlled effectively. The LINAC need methodology does not address this "qualitative" aspect of care provision.

Conclusion

This important Policy will work within the constraints of the SMFP and will address a critical imbalance in access to LINAC services in the state. Adoption of Policy TE-5 will not result in a proliferation of new linear accelerators in North Carolina. The Policy will allow hospitals that provide a significant level of cancer services, but which do not offer radiation oncology, the ability to apply for a certificate of need to acquire LINAC equipment. For these reasons, WakeMed believes the SHCC should approve this Petition.

Attachment 1: LINAC Providers and Average Procedures Per Unit Per Service Area, 2023

Source: 2025 SMFP, Table 15C-1

Facility Name	Service Area Number	County	Number of Linear Accelerators	Number of Procedures (ESTVs) 10/1/2022-9/30/2023	Average Number of Procedures per Unit
Harris Regional Hospital	1	Jackson	1	1,555	1,555
North Carolina Radiation Therapy Management Services - Franklin	1	Macon	1	1,845	1,845
Total Service Area 1			**2**	**3,400**	**1,700**
Mission Hospital	2	Buncombe	3	14,240	4,747
North Carolina Radiation Therapy Management Services - Asheville*	2	Buncombe	1	6,935	6,935
North Carolina Radiation Therapy Management Services - Weaverville	2	Buncombe	1	2,389	2,389
North Carolina Radiation Therapy Management Services - Clyde	2	Haywood	1	4,232	4,232
North Carolina Radiation Therapy Management Services - Marion	2	McDowell	1	3,344	3,344
Total Service Area 2			**7**	**31,140**	**4,449**
Watauga Medical Center	3	Watauga	1	1,934	1,934
Total Service Area 3			**1**	**1,934**	**1,934**
Margaret R. Pardee Memorial Hospital	4	Henderson	1	6,076	6,076
North Carolina Radiation Therapy Management Services - Hendersonville	4	Henderson	1	4,652	4,652
North Carolina Radiation Therapy Management - Brevard	4	Transylvania	1	1,430	1,430
Total Service Area 4			**3**	**12,158**	**4,053**
UNC Health Blue Ridge - Valdese Campus	5	Burke	2	5,475	2,737
Caldwell UNC Health Care****	5	Caldwell	1	0	0
Catawba Valley Medical Center	5	Catawba	2	12,878	6,439
Frye Regional Medical Center - Main Campus	5	Catawba	1	2,527	2,527
Total Service Area 5			**6**	**20,880**	**3,480**
Atrium Health Cleveland	6	Cleveland	1	7,097	7,097
CaroMont Regional Medical Center**	6	Gaston	3	22,929	7,643
North Carolina Radiation Therapy Management Services - Forest City	6	Rutherford	1	4,033	4,033
Total Service Area 6			**5**	**34,059**	**6,812**
Atrium Health Carolinas Medical Center	7	Mecklenburg	3	18,929	6,310
Atrium Health Pineville	7	Mecklenburg	2	13,401	6,701
Atrium Health University City	7	Mecklenburg	1	8,714	8,714
Matthews Radiation Oncology Center	7	Mecklenburg	2	13,963	6,981
Novant Health Huntersville Medical Center	7	Mecklenburg	1	11,391	11,391
Novant Health Presbyterian Medical Center	7	Mecklenburg	2	6,356	3,178
Atrium Health Union	7	Union	1	8,996	8,996
Total Service Area 7			**12**	**81,750**	**6,813**
Iredell Memorial Hospital	8	Iredell	2	5,217	2,609
Lake Norman Radiation Oncology	8	Iredell	1	4,654	4,654
Novant Health Rowan Medical Center-Cancer Institute	8	Rowan	1	7,805	7,805
Total Service Area 8			**4**	**17,676**	**4,419**
Atrium Health Cabarrus	9	Cabarrus	3	13,967	4,656
Atrium Health Stanly	9	Stanly	1	4,141	4,141

Facility Name	Service Area Number	County	Number of Linear Accelerators	Number of Procedures (ESTVs) 10/1/2022-9/30/2023	Average Number of Procedures per Unit
Total Service Area 9			**4**	**18,108**	**4,527**
Atrium Health Wake Forest Baptist	10	Forsyth	4	25,124	6,281
Novant Health Forsyth Medical Center	10	Forsyth	5	25,810	5,162
Hugh Chatham Memorial Hospital****	10	Surry	1	0	0
Total Service Area 10			**9**	**50,934**	**5,659**
Lexington Medical Center	11	Davidson	1	2,815	2,815
Total Service Area 11			**1**	**2,815**	**2,815**
Cone Health Wesley Long Hospital	12	Guilford	4	31,893	7,973
High Point Medical Center	12	Guilford	2	9,723	4,862
UNC Rockingham Hospital	12	Rockingham	1	2,684	2,684
Total Service Area 12			**7**	**44,300**	**6,329**
Randolph Health	13	Randolph	1	3,537	3,537
Total Service Area 13			**1**	**3,537**	**3,537**
University of North Carolina Hospitals	14	Orange	6	39,686	6,614
Total Service Area 14			**6**	**39,686**	**6,614**
Alamance Regional Medical Center	15	Alamance	2	5,594	2,797
Total Service Area 15				**2**	**5,594**
Duke Regional Hospital	16	Durham	1	4,262	4,262
Duke University Hospital Main Campus	16	Durham	8	43,697	5,462
Maria Parham Health	16	Vance	1	3,343	3,343
Total Service Area 16			**10**	**51,302**	**5,130**
FirstHealth Moore Regional Hospital	17	Moore	3	17,727	5,909
Scotland Memorial Hospital	17	Scotland	1	2,951	2,951
Total Service Area 17			**4**	**20,678**	**5,170**
Cape Fear Valley Medical Center	18	Cumberland	5	17,934	3,587
Southeastern Regional Medical Center-Gibson Cancer Center	18	Robeson	2	7,256	3,628
North Carolina Radiation Therapy Management Services - Clinton	18	Sampson	1	2,670	2,670
Total Service Area 18			**7**	**27,860**	**3,980**
New Hanover Regional Medical Center***	19	New Hanover	5	34,265	6,853
Total Service Area 19				**34,265**	**6,853**
Franklin County Cancer Center	20	Franklin	1	0	0
Duke Raleigh Hospital Main Campus	20	Wake	4	26,499	6,625
UNC Health Rex	20	Wake	4	21,868	5,467
UNC Health Rex Radiation Oncology-Holly Springs †	20	Wake	1	0	0
UNC Rex Cancer Center of East Raleigh	20	Wake	1	3,942	3,942
2023 Need Determination[7]	20	Wake	1	NA	NA
Total Service Area 20			**12**	**52,309**	**4,359**
Central Harnett Hospital †	21	Harnett	1	0	0
Total Service Area 21				**0**	**0**
Johnston Health Clayton Professional Plaza	22	Johnston	1	5,931	5,931
Smithfield Radiation Oncology	22	Johnston	1	5,555	5,555
Total Service Area 22			**2**	**11,486**	**5,743**
UNC Lenoir Health Care	23	Lenoir	1	6,015	6,015
North Carolina Radiation Therapy Management Services - Goldsboro	23	Wayne	1	5,595	5,595
Total Service Area 23			**2**	**11,610**	**5,805**

[7] This need determination is currently under appeal; no certificate of need has been issued.

Facility Name	Service Area Number	County	Number of Linear Accelerators	Number of Procedures (ESTVs) 10/1/2022-9/30/2023	Average Number of Procedures per Unit
Carteret Health Care	24	Carteret	2	6,778	3,389
CarolinaEast Medical Center	24	Craven	2	9,332	4,666
Total Service Area 24			**4**	**16,110**	**4,028**
Onslow Radiation Oncology	25	Onslow	1	6,339	6,339
Total Service Area 25				**6,339**	**6,339**
North Carolina Radiation Therapy Management Services - Roanoke Rapids	26	Halifax	1	2,504	2,504
Nash Hospital	26	Nash	20	7,728	3,864
Wilson Radiation Oncology	26	Wilson	1	2,014	2,014
Total Service Area 26			**4**	**12,246**	**3,062**
ECU Health Beaufort Hospital	27	Beaufort	1	3,926	3,926
Vidant Radiation Oncology	27	Hertford	1	2,290	2,290
Vidant Radiation Oncology	27	Pitt	1	7,327	7,327
Vidant Radiation Oncology	27	Pitt	3	16,083	5,361
Total Service Area 27			**6**	**29,626**	**4,938**
Outer Banks Health Hospital	28	Dare	1	3,050	3,050
Sentara Albemarle Medical Center	28	Pasquotank	1	5,199	5,199
Total Service Area 28			**2**	**8,249**	**4,125**
Totals (72 Facilities)			**132**	**650,040**	**4,925**

* Second LINAC decommissioned July 2023.

** CaroMont Regional Medical Center has two linear accelerators in Gaston County and one linear accelerator in Lincoln County

*** New Hanover Regional Medical Center has four linear accelerators in New Hanover County and one linear accelerator in Brunswick County.

**** Facility has a LINAC but reported no procedures on their License Renewal Application or Registration and Inventory form.

† Facility has a CON-approved LINAC under development.

Attachment 2: American College of Surgeons (ACS) Commission on Cancer (CoC) Categories[8]

1. **Academic Comprehensive Cancer Program (ACAD):** The facility participates in postgraduate medical education in at least four program areas, including internal medicine and general surgery. The facility accessions more than 500 newly diagnosed cancer cases each year.

2. **Community Cancer Program (CCP):** The facility accessions more than 100 but fewer than 500 newly diagnosed cancer cases each year.

3. **Comprehensive Community Cancer Program (CCCP):** The facility accessions 500 or more newly diagnosed cancer cases each year.

4. **Free Standing Cancer Center Program (FCCP):** The facility is a nonhospital-based program and offers at least one cancer-related treatment modality. The full range of diagnostic and treatment services is available by referral. Referral to CoC-accredited cancer program(s) is preferred. There is no minimum caseload requirement for this category.

5. **Hospital Associate Cancer Program (HACP):** The facility accessions 100 or fewer newly diagnosed cancer cases each year and has a limited range of diagnostic and treatment services available on-site. Other services are available by referral. Clinical research is not required.

6. **Integrated Network Cancer Program (INCP):** Facilities belonging to an organization that owns a group of facilities that offer integrated and comprehensive cancer care services and is overseen by a centralized governance structure/board and CEO.

7. **NCI-Designated Comprehensive Cancer Center Program (NCIP):** The facility secures a National Cancer Institute (NCI) peer-reviewed Cancer Center Support Grant and is designated a Comprehensive Cancer Center by the NCI. A full range of diagnostic and treatment services and staff physicians are available. Participation in the training of resident physicians is optional, and there is no minimum caseload requirement for this category.

8. **NCI-Designated Network Cancer Program (NCIN):** Facilities belonging to an organization that owns a group of facilities that offer integrated and comprehensive cancer care services and is overseen by a centralized governance structure/board and CEO. Additionally, the facilities secure a National Cancer Institute (NCI) peer-reviewed Cancer Center Support Grant and are designated a Comprehensive Cancer Center Consortium by the NCI. To be included in the NCIN, all facilities must be included within the NCI grant.

9. **Pediatric Cancer Program (PCP):** The stand-alone pediatric facility provides care to children and adolescents below the age of 18 (a center that cares only for teens and older is excluded). The pediatric facility offers the full range of diagnostic and therapeutic services for pediatric patients. The pediatric facility is required to participate in cancer-related clinical research, including the enrollment of patients in cancer-related clinical trials. There is no minimum caseload requirement for this category.

[8] American College of Surgeons Commission on Cancer Accreditation. Cancer Program Categories

10. **CoC Pediatric Specialty Accreditation (CoC-PS):** The pediatric oncology program within an existing CoC-accredited facility provides care to children and adolescents below the age of 18 (a program that cares only for teens and older is excluded). The pediatric oncology program offers the full range of diagnostic and therapeutic services for pediatric patients separate from the adult services. The pediatric oncology program is required to participate in cancer-related clinical research, including the enrollment of patients in cancer-related clinical trials. There is no minimum caseload requirement for this category.

11. **Veterans Affairs Cancer Program (VACP):** The facility provides care to military veterans and offers the full range of diagnostic and treatment services either on-site or by referral, preferably to CoC-accredited cancer programs(s). There is no minimum caseload requirement for this category.

Attachment 3: Linear Accelerators Per 100,000 Population by SMFP LINAC Service Area, FYs 2020-2023

Shown in descending order based on FY23 LINACs per 100,000 population; Based on population of total service area where LINACs are located
Source, 2022-2025 SMFPs (FY20-FY23) Table 15C-1, and NCOSBM Population Data

		FY20			FY21			FY22			FY23		
Quar-tile	**Service Area**	**LINACs**	**Population**	**LINACs/ 100K Pop**	**LINACs**	**Population**	**LINACs/ 100K Pop**	**LINACs**	**Population**	**LINACs/ 100K Pop**	**LINACs**	**Population**	**LINACs/ 100K Pop**
1st	27	10	236,705	4.22	10	237,455	4.21	10	237,089	4.22	10	237,617	4.21
	14	6	148,695	4.04	6	148,629	4.04	6	149,096	4.02	6	150,913	3.98
	17	4	134,654	2.97	4	136,849	2.92	4	139,359	2.87	4	141,428	2.83
	16	10	368,884	2.71	10	373,292	2.68	10	375,816	2.66	10	378,526	2.64
	28	2	77,836	2.57	2	78,902	2.53	2	79,061	2.53	2	79,436	2.52
	1	2	79,826	2.51	2	78,920	2.53	2	80,787	2.48	2	82,426	2.43
	5	8	329,727	2.43	8	332,428	2.41	8	334,799	2.39	8	338,130	2.37
2nd	24	4	169,261	2.36	4	171,823	2.33	4	173,092	2.31	4	173,873	2.30
	10	10	455,110	2.20	10	458,543	2.18	10	461,995	2.16	10	464,836	2.15
	19	4	226,927	1.76	5	230,587	2.17	5	235,771	2.12	5	239,514	2.09
	2	8	376,778	2.12	8	378,803	2.11	8	381,144	2.10	8	385,517	2.08
	4	3	149,574	2.01	3	150,413	1.99	3	151,981	1.97	3	153,790	1.95
	3	1	54,271	1.84	1	54,851	1.82	1	54,744	1.83	1	54,972	1.82
	26	4	222,548	1.80	4	223,049	1.79	4	222,598	1.80	4	223,210	1.79
3rd	18	8	511,827	1.56	8	516,438	1.55	8	515,935	1.55	8	513,922	1.56
	13	2	143,899	1.39	2	143,156	1.40	2	144,587	1.38	2	146,496	1.37
	9	4	289,982	1.38	4	295,039	1.36	4	301,930	1.32	4	307,879	1.30
	6	5	393,037	1.27	5	396,405	1.26	5	401,159	1.25	5	406,010	1.23
	23	2	171,841	1.16	2	170,031	1.18	2	170,301	1.17	2	171,714	1.16
	8	4	335,546	1.19	4	341,476	1.17	4	348,468	1.15	4	354,488	1.13
	15	2	172,348	1.16	2	175,114	1.14	2	178,334	1.12	2	181,097	1.10
	12	7	633,214	1.11	7	635,651	1.10	7	639,303	1.09	7	642,618	1.09
4th	**20**	**11**	**1,204,697**	**0.91**	**11**	**1,224,870**	**0.90**	**11**	**1,245,405**	**0.88**	**12**	**1,272,461**	**0.94**
	7	11	1,358,892	0.81	11	1,374,277	0.80	12	1,394,986	0.86	12	1,419,850	0.85
	22	2	218,141	0.92	2	224,580	0.89	2	233,290	0.86	2	241,049	0.83
	21	1	133,851	0.75	1	134,689	0.74	1	137,842	0.73	1	140,984	0.71
	11	1	169,620	0.59	1	171,699	0.58	1	173,823	0.58	1	176,388	0.57
	25	1	205,746	0.49	1	209,255	0.48	1	210,646	0.47	1	213,447	0.47