

Linear Accelerator Services Workgroup

Meeting 3

December 10, 2025

Workgroup Charge

- Review the current concerns around achieving an adequate supply of LINACs in the state.
 - Review recent activity from the Interested Parties meeting held on February 18, 2025.
 - Review comments from providers regarding the issue of LINAC as standard of care specifically reassess in the current and future oncology practice paradigm what the role and quality standards are for LINAC as part of a comprehensive oncology center/program.
 - Review petitions for LINACs submitted to DHSR in the past 10 years.
 - Gather input from constituencies to understand how the current methodology works and to identify potential problems.
 - Assess whether new policies or a revised methodology are warranted.
- If deemed necessary, develop findings and recommendations for revisions to the SMFP policies and/or the LINAC methodology, and present them to the Technology and Equipment Committee of the SHCC for consideration in Spring 2026.

Definitions

Patient

Course of Treatment

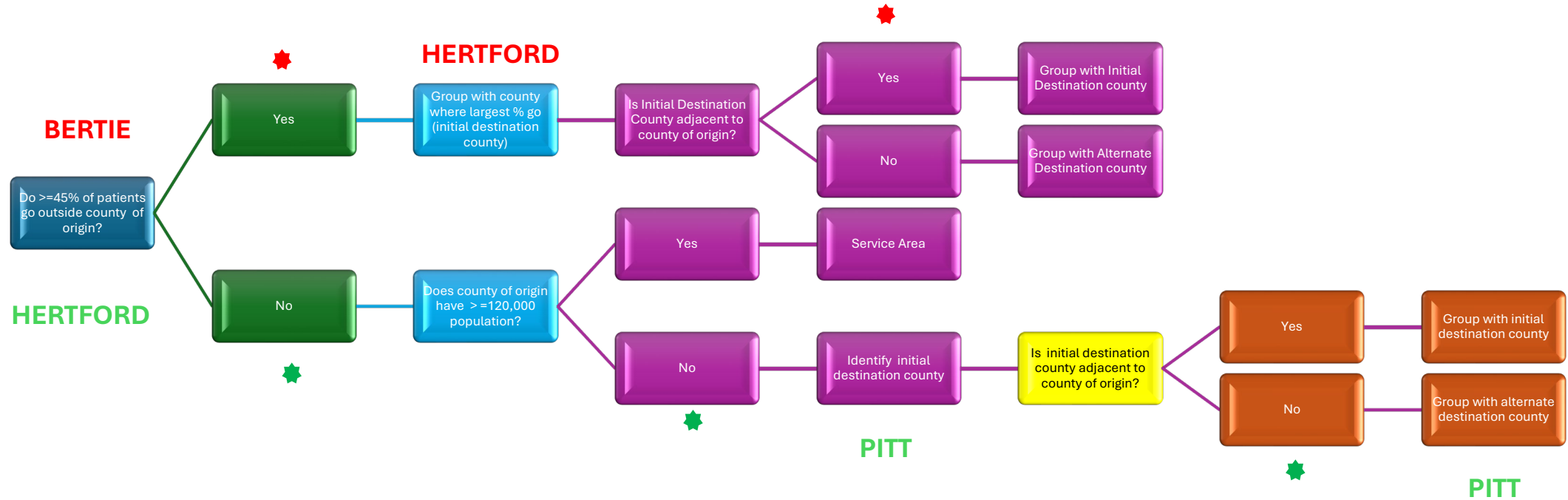
LINAC Procedures - ESTVs

2024 LINAC Procedures by CPT Code

| | CPT Code | CPT Description | ESTVs | Number of Procedures | % of Procedures | Weighted Procedures | % of Weighted Procedures |
|--------------|--------------|---|-------|----------------------|-----------------|---------------------|--------------------------|
| Simple | 77401 | Radiation treatment delivery | 1 | 1,881 | 0.30% | 1,881.0 | 0.28% |
| | 77402 | Radiation treatment delivery (<=5 MeV) | 1 | 621 | 0.10% | 621.0 | 0.09% |
| | 77403 | Radiation treatment delivery (6-10 MeV) | 1 | 25 | 0.00% | 25.0 | 0.00% |
| | 77404 | Radiation treatment delivery (11-19 MeV) | 1 | 4 | 0.00% | 4.0 | 0.00% |
| Intermediate | | | | | | | |
| | 77407 | Radiation treatment delivery (<=5 MeV) | 1 | 46 | 0.01% | 46.0 | 0.01% |
| Complex | | | | | | | |
| | 77412 | Radiation treatment delivery (<=5 MeV) | 1 | 154,384 | 24.26% | 154,384.0 | 23.16% |
| | 77413 | Radiation treatment delivery (6-10 MeV) | 1 | 40,136 | 6.31% | 40,136.0 | 6.02% |
| | 77414 | Radiation treatment delivery (11-19 MeV) | 1 | 17,060 | 2.68% | 17,060.0 | 2.56% |
| Other | 77416 | Radiation treatment delivery (>=20 MeV) | 1 | 1,010 | 0.16% | 1,010.0 | 0.15% |
| | | | | | | | |
| | 77417 | Additional field check radiographs | 0.5 | 35,143 | 5.52% | 17,571.5 | 2.64% |
| | 77418 | Intensity modulated radiation treatment (IMRT) delivery | 1 | 362,046 | 56.90% | 362,046.0 | 54.32% |
| | 77372 | Radiation treatment delivery, stereotactic radiosurgery | 3 | 912 | 0.14% | 2,736.0 | 0.41% |
| | 77373 | Stereotactic body radiation therapy | 3 | 23,015 | 3.62% | 69,045.0 | 10.36% |
| | | | | | | | |
| | Total | | | 636,283 | | 666,565.5 | |

Methodology Scenarios

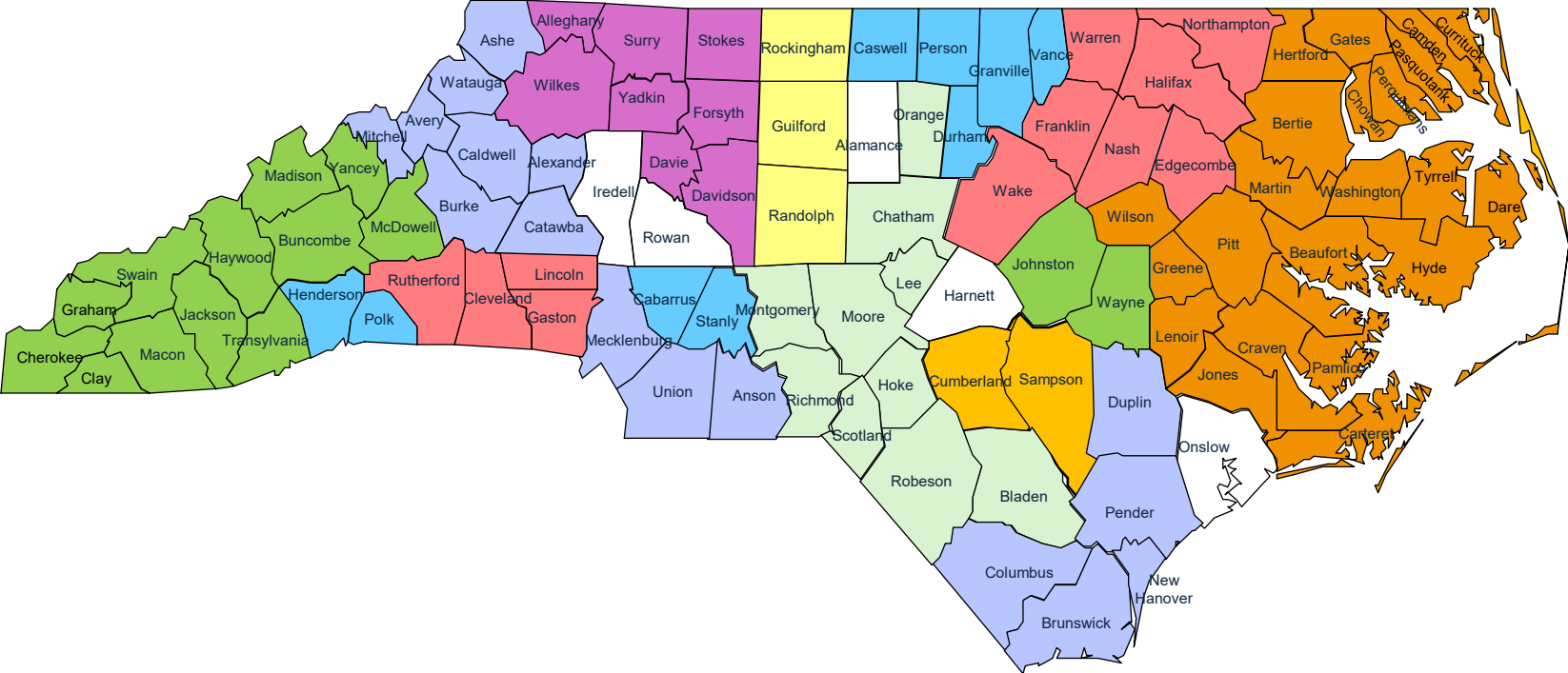
BERTIE (no LINAC) and Hertford (1 LINAC)



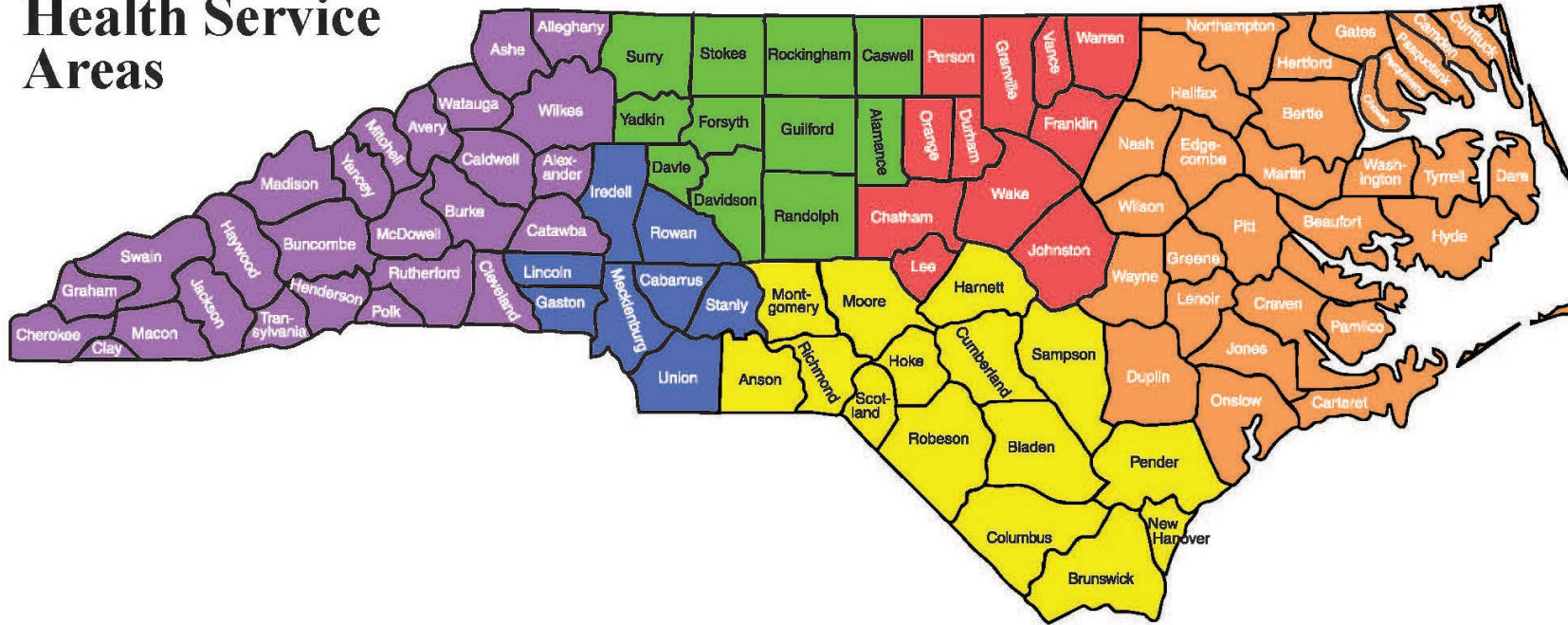
*Halifax is adjacent to Hertford
but no Hertford patients go there*

Base county = the county of origin being evaluated
 Initial Destination county = county where largest % go
 Alternate Destination county = adjacent county where largest % go

Revised LINAC Service Areas – Based on Most Recent Three Years Patient Origin Data



Appendix A: North Carolina Health Service Areas



| Health Service Areas | Counties | Color Code |
|----------------------|---|---|
| HSA I | Alexander, Alleghany, Ashe, Avery, Buncombe, Burke, Caldwell, Catawba, Cherokee, Clay, Cleveland, Graham, Haywood, Henderson, Jackson, Macon, Madison, McDowell, Mitchell, Polk, Rutherford, Swain, Transylvania, Watauga, Wilkes, Yancey |  |
| HSA II | Alamance, Caswell, Davidson, Davie, Forsyth, Guilford, Randolph, Rockingham, Stokes, Surry, Yadkin |  |
| HSA III | Cabarrus, Gaston, Iredell, Lincoln, Mecklenburg, Rowan, Stanly, Union |  |
| HSA IV | Chatham, Durham, Franklin, Granville, Johnston, Lee, Orange, Person, Vance, Wake, Warren |  |
| HSA V | Anson, Bladen, Brunswick, Columbus, Cumberland, Harnett, Hoke, Montgomery, Moore, New Hanover, Pender, Richmond, Robeson, Sampson, Scotland |  |
| HSA VI | Beaufort, Bertie, Camden, Carteret, Chowan, Craven, Currituck, Dare, Duplin, Edgecombe, Gates, Greene, Halifax, Hertford, Hyde, Jones, Lenoir, Martin, Nash, Northampton, Onslow, Pamlico, Pasquotank, Perquimans, Pitt, Tyrrell, Washington, Wayne, Wilson |  |

Utilization Projections

- **Assumption:** Actual statewide utilization (ESTVs) will increase commensurate with the population growth
- Used past 10 years of LINAC data to calculate average 3-year growth (e.g., 2015-2018, 2016-2019, etc.), 4-year and 5-year growth
- Compared actual growth for all possible three-, four-, and five-year periods to projected growth in ESTVs in proposed methodology scenarios

| | Three-Year | Four-Year | Five-Year |
|--------------------------------------|------------|-----------|-----------|
| Mean Population Growth | 3.52% | 4.68% | 5.82% |
| Mean ESTV Growth (ending in 2024) | 4.23% | 5.35% | 5.60% |
| Proposed Methodology ESTV Growth | 3.55% | 4.73% | 5.89% |

Methodology Scenarios

| | | 3-year Projections | | |
|---------------------|-----------------------------|-------------------------|-------------------|-------------------------|
| | | by HSA Utilization | | by Facility Utilization |
| Health Service Area | Adjusted Planning Inventory | Projected LINACs Needed | Projected Deficit | Projected Deficit/Need |
| I | 21 | 12.48 | | 1 |
| II* | 21 | 16.91 | | 1 |
| III* | 23 | 23.26 | 1 | 10 |
| IV** | 30 | 24.44 | | 2 |
| V | 18 | 11.78 | | 2 |
| VI* | 19 | 13.40 | | 2 |
| Total | | | 1 | 18 |

* The 2026 SMFP includes need determinations for LINAC service areas that correspond to HSAs II, III (2 needs), and VI.

**HSA IV needs are 1 less than the projected deficit because they will be offset by the placeholder for the 2023 need determination.

Methodology Scenarios

| | | 3-year Projections | | | 5-year Projections | | |
|---------------------|-----------------------------|-------------------------|-------------------|-------------------------|-------------------------|-------------------|-------------------------|
| | | by HSA Utilization | | by Facility Utilization | by HSA Utilization | | by Facility Utilization |
| Health Service Area | Adjusted Planning Inventory | Projected LINACs Needed | Projected Deficit | Projected Deficit/Need | Projected LINACs Needed | Projected Deficit | Projected Deficit/Need |
| I | 21 | 12.48 | | 1 | 12.62 | | 1 |
| II* | 21 | 16.91 | | 1 | 17.18 | | 1 |
| III* | 23 | 23.26 | 1 | 11 | 23.98 | 1 | 11 |
| IV** | 30 | 24.44 | | 2 | 25.27 | | 3 |
| V | 18 | 11.78 | | 1 | 12.01 | | 2 |
| VI* | 19 | 13.40 | | 2 | 13.51 | | 2 |
| Total | | | 1 | 18 | | 1 | 20 |

* The 2026 SMFP includes need determinations for LINAC service areas that correspond to HSAs II, III (2 needs), and VI.

**HSA IV needs are 1 less than the projected deficit because they will be offset by the placeholder for the 2023 need determination.

Proposed Policy TE-5