



AJCC Future Directions and TNM Staging System Updates

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Disclosures



- J. Gershenwald advisory board/consultant Merck (unrelated to the content of this talk)
- D. Gress nothing to disclose

Cancer QUALITY PROGRAMS of the AMERICAN COLLEGE OF SURGEONS

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Acknowledgement





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Cancer Staging - Background



- AJCC → standard setter for cancer staging
- Principle communication tool common language facilitates worldwide consistency
 - Cancer care patient & clinician clinician
 - Surveillance/Registry reporting: state/province, national, international, etc.
- Risk stratification defines patient groups → staging/prognosis
- Treatment recommendations → often stage-based
- Informs clinical trial eligibility, stratification, analysis
- Informs translational/correlative science

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AJCC Cancer Staging Manuals



Source of Cancer Staging for Decades → 8 Editions

1st - 1977

2nd - 1983

3rd - 1988

4th - 1992

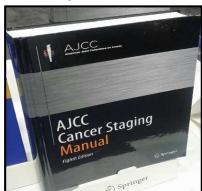
5th - 1997

6th - 2002

7th - 2010

8th - 2017

8th Edition





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Eighth Edition Dedication

American Joint Committee on Cancer
Validating science. Improving patient care.

The AJCC Cancer Staging Manual, 8th Edition is dedicated to all CANCER REGISTRARS in recognition of their:

- education and unique commitment to the recording and maintenant of the state of the patient;
- professi sustaini THANKYOU! ntal to
- dedication to the cataloging of information crucial to cancer research;
- leadership, support, and promulgation of the principles of cancer staging;
- AND THEIR POSITIVE IMPACT ON CANCER PATIENT OUTCOMES.

AJCC Cancer Staging Manual. 8th Ed. New York: Springer; 2017

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Evolution of Cancer Staging - I



- Cancer Staging Manual → rebranded as Cancer Staging System
- Goal → Continue to ensure cancer staging is current, evidence-based, and meets needs of clinical care and surveillance communities

8 th Edition	Version 9
Hardcopy book	Digital product leverages API*-based infrastructure
Chapters	Protocols (1st protocol released October 2020)
Published every 5-7 years	Published on rolling basis
Entire manual (all chapters) published simultaneously	Protocols published disease site by disease site based on needs of clinical care & surveillance communities (and planned coordination with WHO Blue Book cycle update)
Print manual → "static"	Electronic platform facilitates rapid integration of updated staging information into EHRs and cancer registry databases & and use of information; facilitates development of additional tools and applications

*API – application programming interface Cancer

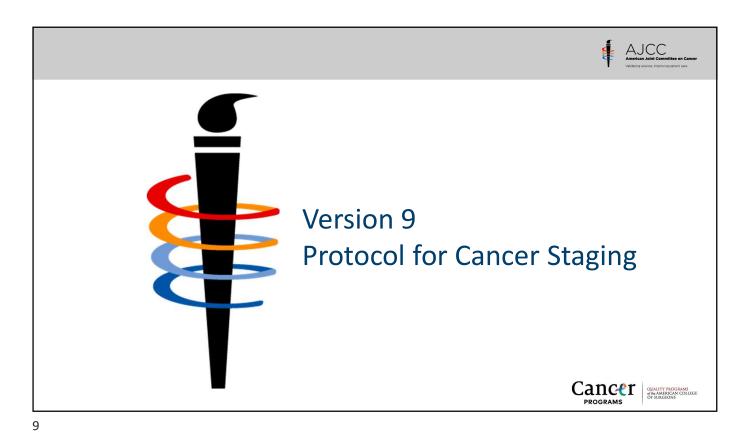


Evolution of Cancer Staging - II



- AJCC Version 9 disease site protocol releases will replace relevant existing Eighth edition chapters over next several years
- Eighth edition Cancer Staging Manual content will continue to be used for staging and cancer surveillance until new Version 9 disease site protocol available
- "Principles of Cancer Staging" chapter in eighth edition remains an important resource \rightarrow select sections included in Version 9 content
- Communication efforts for this effort ongoing and to be expanded to ensure a seamless transition for end users





Version 9 – Protocol Structure

- Version control to clearly indicate Version 9, and allow for minor corrections (typos and other errata)
- Clear indication of effective date for implementation
- Standardized format with required and optional sections
- Clear indications of cancers covered in Protocol and those not staged
- Outline of Staging Report Format to orientate reader

Protocol for Cancer Staging Documentation: (Disease Site)

ACS.AJCC.Protocol.DiseaseSite.2021.v09.00.00

Required Use Date: January 1, 2021

Cancers Staged Using This Staging System

Cancers Not Staged Using This Staging System

These histopathologic types of cancer... Are staged according to the classification for...

Introductory Comments:

The following protocol is intended to standardize communication of critical components of cancer staging. It includes corresponding explanatory notes that provide the level of evidence for each critical element. While the focus of this protocol with synoptic report format is on cancer staging for clinical care and registry support, information on additional and emerging prognostic factors is included. Additional information on staging may be found in the AJCC 8th Edition Chapter 1: Principles of Staging on the AJCC website cancerstaging.org.

Staging Report Format:

- Instructions Summary of Changes
- - ostic Phase
 Identification of Primary Site (anatomy)
 Histopathologic Type
 - Histologic Grade
 - Consensus Molecular Subtype (optional) Modalities Used for Diagnosis and Staging

 Clinical examination

 - Imaging
 Diagnostic Procedures/Surgical Procedures
- Other (as needed)

 Staging Phase (Classification)
 Clinical Staging and Workup
 Pathological Staging and Workup

 - Staging Rules
 - Rules for Classification

 - Assignment of AJCC TNM (Tables)
 AJCC Prognostic Stage Groups (Tables)

Protocol Format – 3 Key Components



- Synoptic staging report format
 - Provides key information registrars need
 - Includes new items
 - Modalities used for staging
 - · Clinical staging and workup
 - Pathological staging and workup
 - Staging rules
- Explanatory notes
 - Provide the same details found in previous AJCC chapters
 - Includes images for primary site, nodal map, and T N M categories
- Supplemental information includes general staging rules

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V9 Cervix Uteri Protocol		
Example - Synoptic Element & Explanatory Note		
Imaging (Note I) Ultrasound CT scan MRI PET/CT Other	Magnetic resonance imaging (MRI) is currently the preferred modality for local assessment of cervical cancer. Contrast-enhanced CT does not have the soft-tissue resolution necessary to evaluate the local extent of the tumor and may not be helpful in assessing early disease, specifically in patients who want to undergo fertility-preserving surgery. Determine MRI In the size, with abnormal being setting of tumor expectation. Intravaginal gel is reconded status in patients who astatic, unless valuating for with early parametry and the tumor contrast resolution. Intravaginal gel is reconded status in patients who astatic, unless valuating for with early parametry tumor expectation. Ultrasound the tumor contrast resolution astatic, unless valuating for the tumor contrast resolution. Intravaginal gel is reconded status in patients who astatic, unless valuating for with early parametry. Contribution of Imaging to TNM Staging as the local extent of the tumor and may not be local extent of the tumor and may not	
Category T1a disease is not seen on imaging. Although invasior invasion cannot be assessed with a level of certainty appropriate for this purpose is discouraged. In T1b disease, the tumor is visi		
American College of Surgeons 2022—Content canno	by measuring the greatest diameter of the tumor in any plane, or disease involves the upper two-thirds of the vagina, which is vist to the reproduced or repurposed without written permission of the American College of Surgeons.	

Version 9 - Clinical Staging and Workup



- Simplified algorithm of workup for clinical TNM stage
 - Type of diagnostic workup such as exam, imaging, and labs
 - Description of information provided
 - Specific contribution to TNM categories and stage groups
- Provides clarity and guidance to physicians
- Helps registrars understand
 - Why certain exams, procedures, imaging is ordered
 - How it contributes to staging and which TNM category is affected

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Clinical Staging Workup-V9 Cervix Uteri SPECIFIC CONTRIBUTION TO TIM DIAGNOSTIC WORKUP DESCRIPTION CATEGORY Clinical exam Colposcopy Size, local spread Tla-Tlb Tla-T4 Biopsy Microscopic confirmation Endocervical curettage Microscopic confirmation Tla-Tlb Conization, cone biopsy Microscopic confirmation Tlal - may be treatment Loop electrosurgical excision procedure (LEEP) Inspection and palpation Visible and palpable lesions Exam under anesthesia (EUA) Size, spread to vagina, parametrium, Proctoscopy Bladder or rectum mucosa involvement Imaging CT Chest/abdomen/pelvis for T1b-T4 T1b-T4, N0-2; T1a not seen on imaging PET/CT (whole body) Base of neck to mid-thigh T1b-T4, N0-2, M0-1 MRI Pelvis - define extent of local disease T1b-T3b, N0-1; T1a not seen on imaging Pelvis - define extent of local disease US T1b-T3b, N0-1; T1a not seen on imaging Intravenous urography (IVP) Hydronephrosis T3b M1 distant metastasis X-ray lungs, skeleton Pulmonary metastasis Labs Immunohistochemistry (IHC), microscopy Histopathological classification Luncer

Version 9 – Pathological Staging and Workup



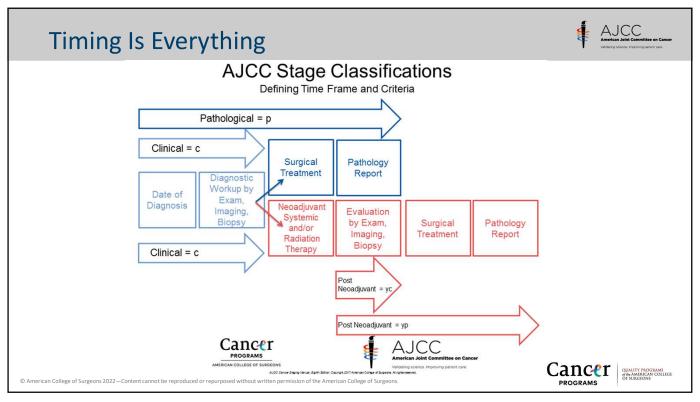
- Simplified algorithm of workup for pathological stage
 - Starts with specific TNM category
 - Lists specimen
 - Describes how pathologist uses information to assign category
 - Describes how managing physician uses info to assign category
 - Provides some key staging rules
- Provides guidance to pathologists and managing physicians
- Helps registrars understand
 - How it contributes to staging and which TNM category is affected
 - Provides some key rules

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Pathological Staging Workup—V9 Cervix Uteri MANAGING PHYSICIAN CATEGORY SPECIMEN PATHOLOGIST (Stage Documented by Cancer Registry) General · Assignment of pTNM categories for the · Assignment of pTNM categories are patient requires use of information from Information based on surgical resection specimen, as well as intraoperative findings, biopsy all biopsy procedures performed during procedures and clinical evaluation up to the clinical evaluation up to and including the point of definitive surgical treatment, definitive surgical treatment if available Requires information from clinical · All other surgical procedure specimens assessment or imaging studies or use cTNM. For example, biopsy of a interoperative findings to assign pTNM positive regional lymph node without categories (may not change pTNM, but surgical resection of the primary must be considered) carcinoma is classified as cN1 pTX May assign if unable to determine pT category Not for use by pathologist; assigned only by after surgical resection managing physician pT0 No tumor found in specimen and never No tumor found in specimen and never identified on diagnostic biopsies identified on diagnostic biopsies pT1 Pathologic information from surgical Pathology Report(s) Conization specimen. trachelectomy, specimen(s) only pTla simple or radical pTlal pTla2 cancer QUALITY PROGRAMS of the AMERICAN COLLEGE OF SURGEONS © American College of Surgeons 2022—Content cannot be reproduced or repurposed without written permission of the American College of Surgeons



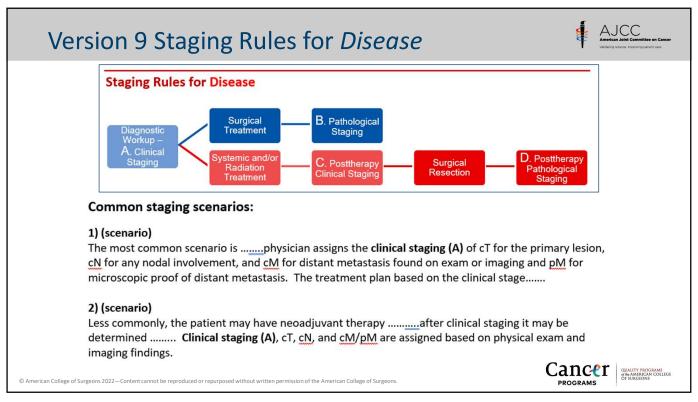
Version 9 – Protocol Features

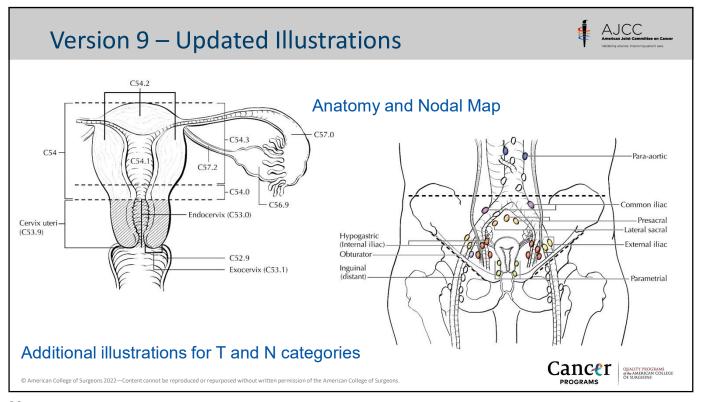


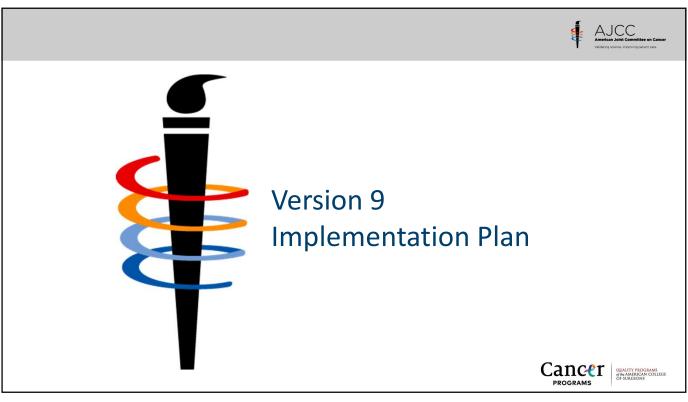
- Diagram of AJCC stage classification time frame & criteria
 - Specific to disease site
 - Based on common treatment
- Common staging scenarios
 - Provide staging guidelines for most common treatment scenarios
 - Reminds physicians of staging rules
 - Guidance for assigning clinical, pathological, or posttherapy stage

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Next Disease Sites - Version 9

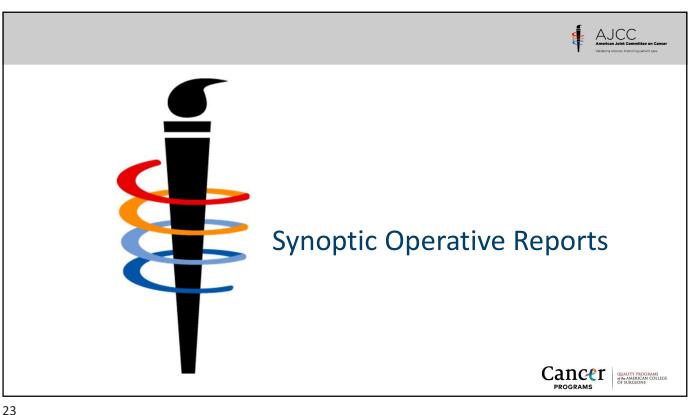


- Timeline for Version 9 releases
 - Provided to surveillance partners in May
 - Included in Cancer Surveillance DLL for registry software by July
 - Release Disease Site Protocol in fall, digital and print
 - Effective for registrars the following January
- Timeline provides registrars with >8 months notice
- Upcoming Version 9 protocols 2023
 - Anus
 - Appendix

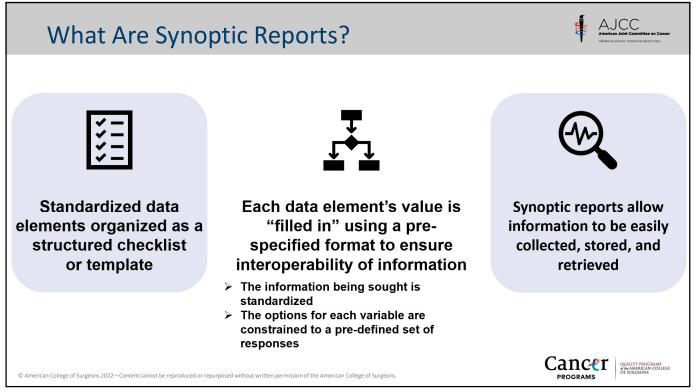
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Synoptic Operative Reports



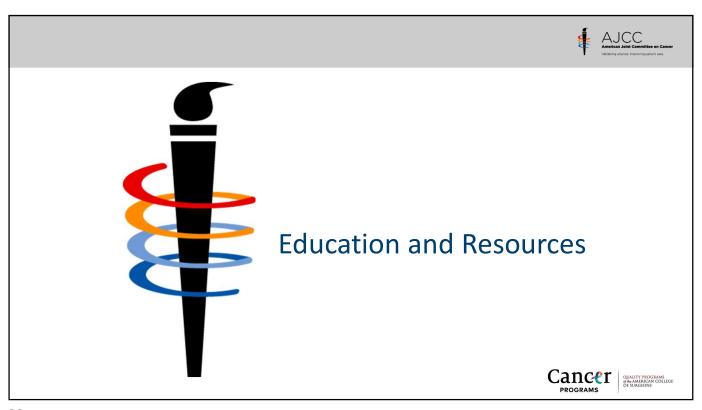
- New Cancer Programs initiative
- Stay tuned...Saturday sessions will discuss

CoC Cancer Programs Concurrent TracksNational Harbor 2-3

- 9:00am-9:45am New Directions in Cancer Care
- 9:50am-10:35am Registrars Role in Measuring Compliance with CoC Synoptic Operative Reports

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Education - AJCC Version 9



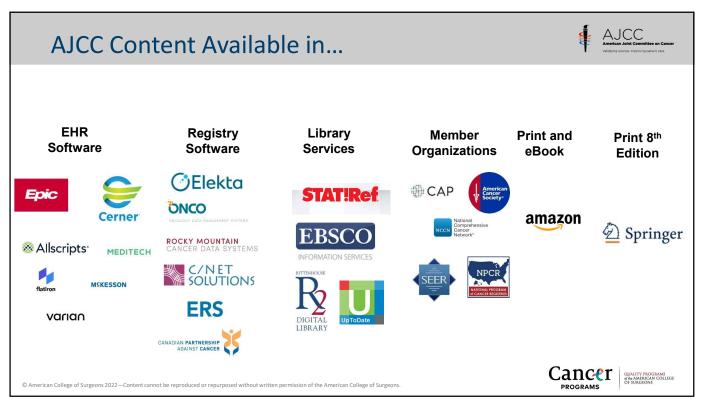
- Physician education
 - Expert panels articles for medical journals
 - Physician to Physician short webinars
 - Information to AJCC member organizations to inform physicians of new protocols and education available
- Registrars
 - Webinars to highlight key changes in staging system
 - Disease sites will be added to CAnswer Forum AJCC Version 9
- Expanded educational initiatives in development

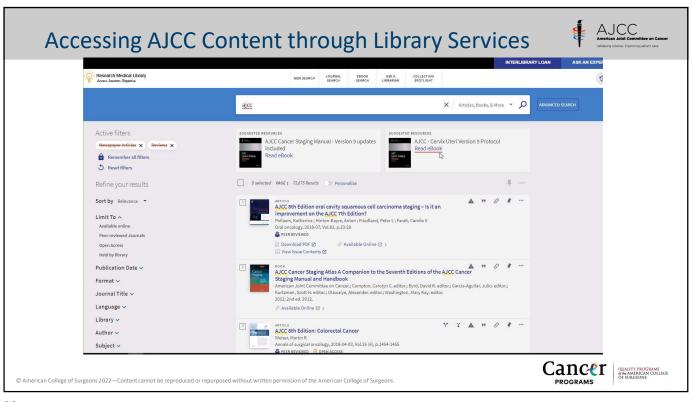


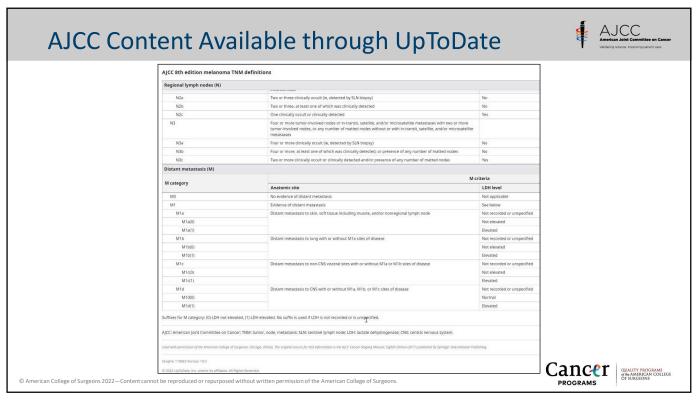
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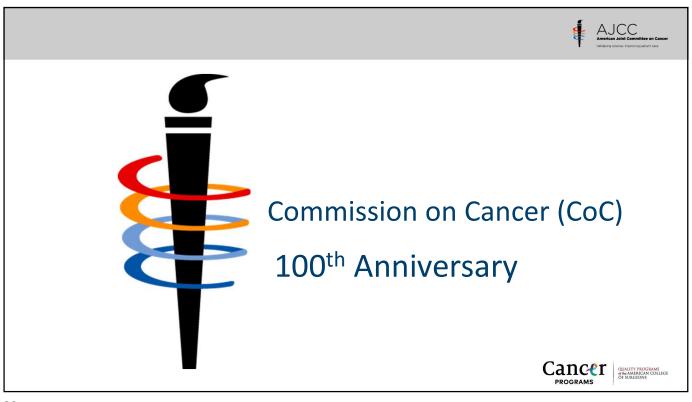
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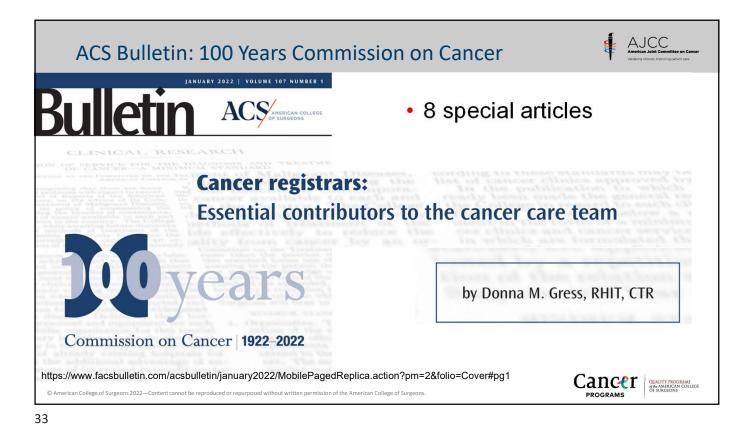
Version 9 Staging Rules for Disease Staging Rules for Disease Staging Rules for Disease Surgical Treatment Staging Sugarial Resection Staging Surgical Treatment Clinical Staging Resection Surgical Treatment Staging Surgical Resection Staging Surgical Resection Surgical Resection D. Posttherapy Pathological Staging D. Posttherapy Pathological Staging Staging Staging C. Posttherapy Common Staging Scenarios: 1) (scenario) The most common scenario isphysician assigns the clinical staging (A) of cT for the primary lesion, cN for any nodal involvement, and cM for distant metastasis found on exam or imaging and pM for microscopic proof of distant metastasis. The treatment plan based on the clinical stage...... 2) (scenario) Less commonly, the patient may have neoadjuvant therapyafter clinical staging it may be determined Clinical staging (A), cT, cN, and cM/pM are assigned based on physical exam and imaging findings.















HIGHLIGHTS

Cancer registrars: Essential contributors

- Describes the evolution of early cancer registries
- Summarizes how computerization and coding standards led to a transformation of the registrar's role
- Explains the need for enhanced focus on surveillance and staging in cancer care

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Cancer registrars: Essential contributors



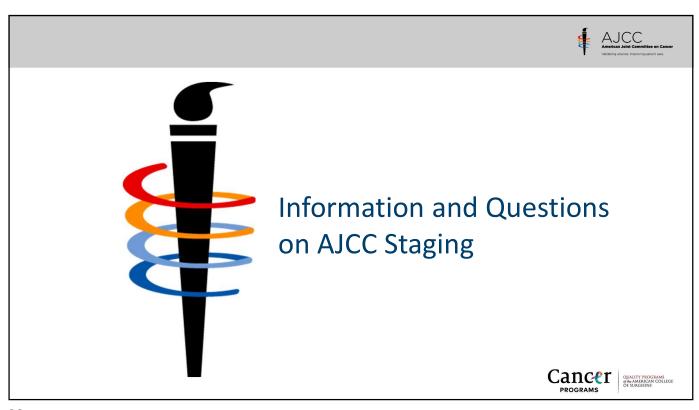
- 1982 AJCC breast cancer staging became requirement
- AJCC staging relies on
 - Understanding anatomy and practice of medicine
 - Synthesize diagnostic workup info into clinical stage
 - Incorporate clinical stage, operative findings, and path report for pathological staging
- New threshold of knowledge for AJCC staging by registrars
- Article brings attention to registrars knowledge & role

https://www.facsbulletin.com/acsbulletin/january2022/MobilePagedReplica.action?pm=2&folio=Cover#pg1

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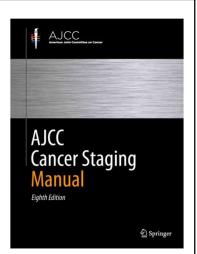


AJCC Web site



- https://cancerstaging.org
- https://www.facs.org/quality-programs/cancer/ajcc
- General information
 - Education
 - Articles
 - Updates
- For Registrars
 - Webinars with free CE hrs
 - Critical Clarifications
 - Staging Moments

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CAnswer Forum



- Submit questions to AJCC Forum
 - Version 9 Forum
 - 8th Edition Forum
 - Located within CAnswer Forum
 - Located within Canswel Forum
 - Provides information for all
 - Allows tracking for educational purposes
- http://cancerbulletin.facs.org/forums/

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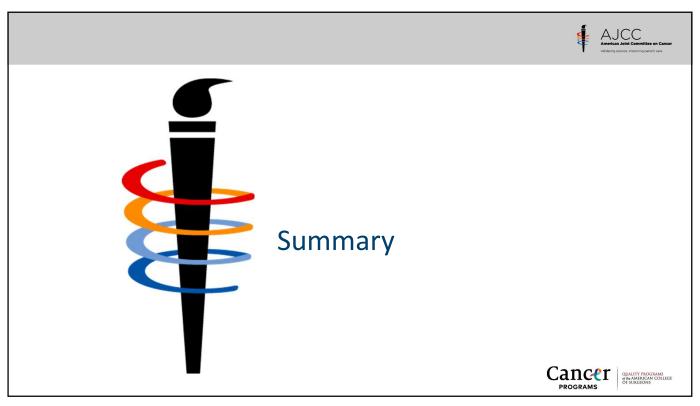


CAnswer

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FORUM

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Summary



- Illustrated key features of Version 9 protocol format
 - Examples of new areas
 - Revealed synergy between synoptic format and explanatory notes
 - Showcased staging rules diagram and scenarios
- Plans for protocol implementation advance notice to stakeholders including registrars
- Introduced plans to educate stakeholders and provide resources

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