

Standard 4.6: The Importance of CAP Protocols and Understanding Synoptic Reporting

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Commission on Cancer, American College of Surgeons

Standard 4.6

The guidelines for patient management and treatment currently required by the CoC are followed.

Standard 4.6

Purpose:

To encourage an organized
approach to providing quality
care

Two components

Cancer committee reviews quality
of care

90% of eligible pathology reports
include the scientifically
validated elements defined by
CAP

Quality of Care component

Cancer committee responsibilities:

Reviews the quality of care using
the CoC tools

Annually reports and discusses
findings at committee meetings

Quality of Care component

CoC responsibilities:

Confirm cancer committee
activity

Surveyor review of selected
cases during on-site visit

**History of Active Monitoring Reported in the SAR:
verify through review of minutes**

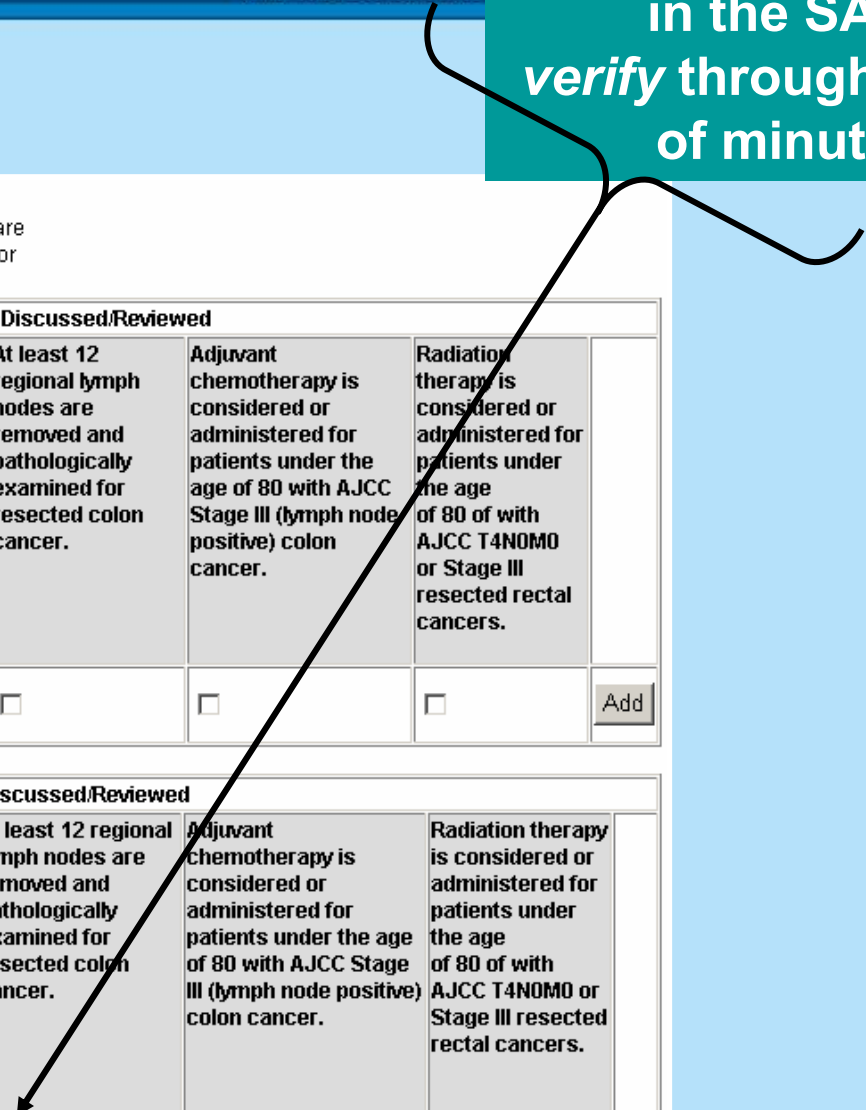
A MULTIDISCIPLINE PRO

Quality of Patient Care

Enter the date of the cancer committee's discussions of the quality of patient care using the CoC quality reporting tools, and check all measures discussed and/or reviewed. Check all measures that apply for each entry.

Date of Cancer Committee Discussion / Review	Measure(s) Discussed/Reviewed						Add
	Radiation therapy is administered to women under age 70 receiving breast conserving surgery for breast cancer.	Combination chemotherapy is considered or administered for women under 70 with AJCC T1c, or Stage II or III hormone receptor negative breast cancer.	Tamoxifen or third generation aromatase inhibitor is considered or administered for women with AJCC T1c or Stage II or III hormone receptor positive breast cancer.	At least 12 regional lymph nodes are removed and pathologically examined for resected colon cancer.	Adjuvant chemotherapy is considered or administered for patients under the age of 80 with AJCC Stage III (lymph node positive) colon cancer.	Radiation therapy is considered or administered for patients under the age of 80 of with AJCC T4N0M0 or Stage III resected rectal cancers.	
<input type="text"/> (mm/dd/yy)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

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01/13/09	Yes	Yes	Yes	Yes	Yes	Yes	Edit
03/14/07	Yes	Yes	Yes	Yes	Yes	Yes	Edit
04/08/08	Yes	Yes	Yes	Yes	Yes	Yes	Edit



Commission on Cancer - Standard 4.6 Surveyor Review - Case List

Combination chemotherapy is considered or administered within 4 months (120 days) of diagnosis for women under 70 with AJCC T1c N0 M0, or Stage II or III ERA and PRA negative breast cancer [MAC].

Adjuvant chemotherapy is considered or administered within 4 months (120 days) of diagnosis for patients under the age of 80 with AJCC Stage III (lymph node positive) colon cancer [ACT].

Hospital Name:
Your Medical Center

Confirmed Survey Date:

Performance Rate:
MAC: 40% ACT: 64.3%

Surveyor:

Benchmark Rate:
MAC: 77.7% ACT: 74.1%

Acc Num	Seq Num	Dx Date	Dx Age
200600038	00	01/17/2006	58
200600051	00	01/26/2006	59
200600070	00	01/06/2006	43
200600103	01	01/03/2006	62
200600108	00	01/17/2006	67
200600135	00	02/01/2006	58
200600150	00	02/09/2006	36
200600224	00	02/09/2006	67
200600240	00	02/09/2006	64

[Download PDF](#)

For each of the listed cases:

- Have ready for review the hospital patient chart and cancer registry abstract.
- Flag the medical oncology consult notes and treatment summary reports/letters appearing in the patient chart, and highlight those sections of the cancer registry abstract related to first course systemic therapy.

Quality of Patient Care: Case Review List Posted 2 Weeks Prior to Survey Date

Registries – get PDF of SAR displayed case list

Surveyors – get PDF with case-specific review directives

Program PDF: Case List and Preparation Instructions



For each of the listed cases:

- Have ready for review the hospital patient chart and cancer registry abstract.
- Flag the medical oncology consult notes and treatment summary reports/letters appearing in the patient chart, and highlight those sections of the cancer registry abstract related to first course systemic therapy.

[HT] Tamoxifen or third generation aromatase inhibitor is considered or administered within 1 year (365 days) of diagnosis for women with AJCC T1c N0 M0, or Stage II or III ERA and/or PRA positive breast cancer.

Performance Rate: 13.6%

Benchmark Rate: XX.X %

Case IDs			
Acc Num	Seq Num	Dx Date	Pt. Age
200600178	00	03/03/2006	63
200600427	00	07/26/2006	50
200600669	00	11/30/2006	88
200600621	00	10/26/2006	60
200600396	00	07/13/2006	42
200600117	00	03/16/2006	47
200600717	00	12/22/2006	42
200600105	01	02/17/2006	59
200600250	00	05/12/2006	93
200600302	00	06/01/2006	61
200600627	00	11/14/2006	73
200600115	00	03/17/2006	74
200600420	00	07/18/2006	45
200600118	00	03/24/2006	50
200600481	00	08/16/2006	66
200600472	00	08/24/2006	67
200600389	00	07/10/2006	46

CAP protocol component

All SVDE included
In 90% of
pathology reports

Applies to:

Invasive tumors
Resected
specimens

Commendation
requirements

All SVDE
included in 90%
of reports

AND

SVDE in
synoptic format

CAP protocol component

- ◆ CAP (College of American Pathologists) leading organization of board certified pathologists in the US
- ◆ In the 1990's numerous research studies revealed there was great variation in the content of cancer related pathology reports

CAP protocol component

- ◆ In response to these studies, the CAP cancer committee developed tumor site specific checklists (protocols) to help pathologists use a common reporting framework
- ◆ Today, these checklists serve as a guideline for the required reportable elements for specific cancer types

CAP protocol component

- ◆ Starting on January 1, 2004, the Commission on Cancer mandated that all pathologists at CoC-accredited cancer programs include all of the scientifically validated data elements in the pathology reports of definitive cancer resections

CAP protocol component

- ◆ Currently over 60 cancer CAP protocols for the most common cancer types
- ◆ They are constantly updated and expanded and the most recently updated protocols were posted in September, 2009 on the CAP web site at www.cap.org which are to be used starting in 2010

CAP protocol component

- ◆ CAP is allowing some flexibility in the use of the 2009 protocols if the program has not been able to undergo complete conversion to the 2010 protocols
- ◆ In additions, the CAP is working toward taking over the role of evaluating the pathologist reports and has started to include it in their lab accreditation program

CAP protocol component 2010

- ◆ For compliance, all SVDE must best included in 90% of pathology reports
- ◆ For commendation, all SVDE must be included in 90% of pathology reports and all SVDE must be in a synoptic format

What is Synoptic Format?



College of American Pathologists
325 Waukegan Road, Northfield, Illinois 60093-2750
800-323-4040 • <http://www.cap.org>
Advancing Excellence

January 6, 2009

Frederick L. Greene, MD, FACS, Chair
American College of Surgeons, Commission on Cancer
633 N. Saint Clair St.
Chicago, IL 60611

Dear Dr. Greene:

The College of American Pathologists (CAP) applauds and supports the Commission on Cancer's (COC) initiative to motivate cancer centers to incorporate a synopsis of cancer pathology staging, prognostic and predictive parameters (CAP protocol endorsed scientifically validated data elements – SVDE) into their reports by offering commendation status in COC Standard 4.6. The following definitions and examples attempt to create guidelines for writing, reading, and inspecting pathology reports. Standard 4.6 allows traditional narrative style reporting in addition to, but not instead of, synoptic style reporting in which the required SVDE defined in the published CAP Cancer Protocols are listed.

The CAP has developed this list of specific features that define *synoptic* reporting formatting:

1. Data is displayed as the required checklist item (SVDE) followed by its answer (response), e.g. "Tumor Size: 5.5 cm".
2. Each diagnostic parameter pair (checklist SVDE: response) is listed on a separate line.
3. The synopsis can appear in the diagnosis section of the pathology report, at the end of the report or in a separate section, but all SVDE and responses must be listed together in one location.
4. Additional items (not required for the CAP checklist) may be included in the synopsis but all required SVDE must be present.
5. Narrative style comments are permitted in addition to, but are not as a substitute for the synoptic reporting. It is not uncommon for narrative style comments to be used for clinical history, gross descriptions and microscopic descriptions.

The CAP has developed a few examples of synoptic reporting and I have included these for the use of the COC as training tools for COC inspectors. Sample reports 1 and 2 are examples of acceptable synoptic reporting; Sample reports 3 and 4 do not show acceptable synoptic style reporting. We would recommend that CoC surveyors focus their evaluation of synoptic reporting only on definitive resection specimens and not biopsies at this time.

To make this important transition more effective the College of American Pathologists Cancer Committee, along with the Diagnostic Intelligence and Health Information Technology Committee, offer to form an ad-hoc review panel for cancer centers who may want to submit up to 3 cases to ensure if they conform to the synoptic reporting format.

Sincerely,

Mahul B. Amin, MD
Cancer Committee Chair

cc: John F. Madden MD PhD, Monica de Baca MD, Thomas M. Wheeler MD,
Paul N. Valenstein MD

College of American Pathologists

Defined in letter
from CAP

Letter and
examples found in
Best Practices
Repository

[http://www.facs.org/
cancer/coc/bestprac
tices.html](http://www.facs.org/cancer/coc/bestpractices.html)

Synoptic Format

Data is displayed as the required checklist item (SVDE) followed by its answer (response)

Each diagnostic parameter pair (SVDE: response) is listed on a separate line

Laterality: Left

Tumor size: 5.5 cm

Histology: Adenocarcinoma

All SVDE and responses must be listed together in one location in the report

All SVDE must be present; other items may be included

Narrative comments permitted but do not substitute for synoptic reporting

What Does Synoptic Reporting Look Like?

DIAGNOSIS SECTION:

KIDNEY (LEFT): ADENOCARCINOMA

MACROSCOPIC

SPECIMEN TYPE: Radical Nephrectomy
LATERALITY: Left
TUMOR SITE: Upper pole
FOCALITY: Unifocal
TUMOR SIZE: Greatest dimension is 7.2 cm
MACROSCOPIC EXTENT OF TUMOR: Tumor extends into major veins

MICROSCOPIC

HISTOLOGIC TYPE: Clear cell (conventional) renal carcinoma
HISTOLOGIC GRADE: (Furhman Nuclear Grade): 2

PATHOLOGIC STAGING (pTN)

PRIMARY TUMOR (pT): pT3
REGIONAL LYMPH NODES (pN): Nx
Number of lymph nodes examined: 0
Number of lymph nodes involved: 0
MARGINS: Renal vein margin positive
ADRENAL GLAND: Uninvolved
VENOUS (LARGE VESSEL) INVASION (V)(excluding renal vein and inferior vena cava): Negative
LYMPHATIC (SMALL VESSEL) INVASION (L): present
ADDITIONAL PATHOLOGIC FINDINGS: Chronic glomerulonephritis present in non-involved renal parenchyma.

What Does Synoptic Reporting Look Like?

History: 79 year old male with dyspepsia and weight loss. A recent supraclavicular lymph node biopsy revealed signet ring cell adenocarcinoma

Gross Description: Received in formalin is a 10.0 x 6.5 x 3.2 cm segment of stomach, with a palpable firm 4.0 x 2.2 cm mass on the designated lesser curvature. The external surface of the specimen is unremarkable and inked black. The cut surfaces demonstrate the mass and adjacent firm areas of nodularity. The remainder of the gastric mucosa is unremarkable. Six lymph node candidates and representative sections of the stomach are submitted.

Microscopic description: Microscopic examination was performed. See synoptic report. The uninvolved stomach shows chronic inactive gastritis with intestinal metaplasia.

DIAGNOSIS: Stomach (proximal): Invasive adenocarcinoma

SPECIMEN TYPE: Stomach, partial gastrectomy, proximal

TUMOR SITE: Lesser curvature

TUMOR CONFIGURATION: Diffusely infiltrative

TUMOR SIZE: 4 cm in greatest dimension

HISTOLOGIC TYPE: Signet ring cell carcinoma

HISTOLOGIC GRADE: See comment below

MARGINS

PROXIMAL: Negative

DISTAL: Negative

RADIAL: Negative

DISTANCE OF INVASIVE CARCINOMA FROM NEAREST MARGIN: 3 mm, radial

LYMPHATIC INVASION: Present

LARGE VESSEL INVASION: Absent

PERINEURAL INVASION: Present

PATHOLOGIC STAGING (pTN):

PRIMARY TUMOR: pT2a (tumor invades muscularis propria)

REGIONAL LYMPH NODES: pN1

Number examined: 6

Number involved: 5

DISTANT METASTASIS: pM1

See report S2343 (non-regional lymph node metastasis)

COMMENT: Signet-ring cell carcinomas are not typically graded but are high-grade and would correspond to grade 3.

What Synoptic Reporting Doesn't Look Like

Pathology Report Sample 3

Name: Jane Doe

History: 76 y/o female with colonic mass

DIAGNOSIS:

Invasive adenocarcinoma, 3.4 x 3.0 cm involving muscularis
All margins negative
No lymphatic invasion
No metastatic tumor identified.

GROSS DESCRIPTION: Received fresh is a right colon 32 cm in l
x 3.0 cm nodular mass. 36 lymph nodes were retrieved. Representat

MICROSCOPIC DESCRIPTION: Microscopic examination perfo

NAME: JANIS DOE

DIAGNOSIS:

KIDNEY, LEFT (RADICAL NEPHRECTOMY):

Clear cell adenocarcinoma, Fuhman nuclear grade 3, 8.3 cm, unifocal involving upper pole of kidney and extending into the renal vein with the renal vein margin positive.

No lymph nodes submitted, adrenal gland uninvolved, lymphatic invasion present, no venous large vessel invasion, pT3, Nx.

**NOT ACCEPTABLE AS SYNOPTIC
NOT ALL ELEMENTS**

CLINICAL HISTORY: A 86 year old female with a left renal mass in the upper pole

GROSS DESCRIPTION SECTION: Received in formalin, labeled "left kidney" is a 14.5 x 7.1 x 2.5 cm kidney with unremarkable perirenal fat present at the upper pole (suture oriented, per requisition). A 5.3 cm in length segment of ureter exits from the hilum. The renal vein appears occluded. The cut sections of the specimen demonstrate a 8.3 x 2.5 x 1.5 cm tan-orange partially circumscribed tumor with sharp borders and central hemorrhage present in the upper pole. Gerota's fascia appears uninvolved. The tumor extends into the renal vein; the venous margin appears positive for tumor. The remainder of the kidney is unremarkable.

MICROSCOPIC SECTION: Microscopic examination performed.

**ALTHOUGH ALL ELEMENTS ARE PRESENT, NOT
ACCEPTABLE AS SYNOPTIC STYLE REPORTING**

Report #1

FINAL INTERPRETATION:

**SPECIMEN A - SENTINEL LYMPH NODE #1, LEFT AXILLA, EXCISION:
ONE BENIGN LYMPH NODE.**

**SPECIMEN B - SENTINEL LYMPH NODE #2, LEFT AXILLA, EXCISION:
ONE BENIGN LYMPH NODE.**

**SPECIMEN C - LEFT AXILLARY LYMPH NODE, EXCISION:
ONE BENIGN LYMPH NODE.**

SPECIMEN D - LEFT BREAST, SIMPLE MASTECTOMY:

1. **INFILTRATING DUCTAL CARCINOMA, TUBULAR TYPE, OF MID UPPER BREAST (1.5 CM).**
2. **PROMINENT TUBULE FORMATION (SCORE EQUALS 1 OF 3).**
3. **MINIMAL NUCLEAR PLEOMORPHISM (SCORE EQUALS 1 OF 3).**
4. **LESS THAN ONE MITOSIS PER TEN HIGH POWERED FIELDS (SCORE EQUALS 1 OF 3).**
5. **GRADE 1 OF III (TOTAL NOTTINGHAM SCORE EQUALS 3 OF 9).**
6. **NO CARCINOMA-IN-SITU IS IDENTIFIED.**
7. **SEVERAL TUMOR MICROCALCIFICATIONS ARE PRESENT.**
8. **TUMOR NECROSIS IS ABSENT.**
9. **ALL MARGINS ARE FREE OF CARCINOMA WITH INVASIVE CARCINOMA EXTENDING TO WITHIN 0.4 CM OF THE NEAREST (SUPERIOR) MARGIN.**
10. **NO LYMPHATIC OR VENOUS INVASION IS IDENTIFIED.**
11. **THE NONNEOPLASTIC BREAST DEMONSTRATES MILD USUAL EPITHELIAL HYPERPLASIA, APOCRINE METAPLASIA, MICROCALCIFICATIONS, AND DUCT ECTASIS AND STASIS.**
12. **ADDITIONALLY, THE PREVIOUS BIOPSY SITE DEMONSTRATES HEMORRHAGE AND FAT NECROSIS.**
13. **BENIGN NIPPLE DEMONSTRATING NO DIAGNOSTIC ABNORMALITY.**
14. **SKIN DEMONSTRATING TWO BENIGN HEMANGIOMAS.**

COMMENT: This tumor is consistent with TNM stage pT1cN0(sm)MX.

Report #1

Laterality: Left

Size of Invasive Component (greatest dimension): 1.5cm (no carcinoma in situ is identified)

Histologic Type: Infiltrating Ductal Carcinoma, Tubular Type

Nottingham Grade or Other Grade: 3/9

Mitotic Count *: <1 per HPF

Primary Tumor (pT): pT1c

Regional Lymph Nodes (pN): cM0(sm)

Distance from uninvolved margin or identification of the margin involved: 0.4 cm

*(Not required if other grading system is used)

Assessment:

Not synoptic. Multiple items appear on the same line. Not using the element:response format

Report #2

FINAL INTERPRETATION:

SIGMOID COLON, SEGMENTAL RESECTION:

1. **INVASIVE COLONIC ADENOCARCINOMA, LOW GRADE (4.2 CM).**
2. **FOCALLY THE TUMOR EXTENDS THROUGH THE MUSCULARIS PROPRIA WITH 2 TO 3 MM INVASION OF THE PERICOLONIC ADIPOSE TISSUE.**
3. **PROXIMAL, DISTAL AND RADIAL MARGINS ARE FREE OF DYSPLASIA OR CARCINOMA WITH INVASIVE CARCINOMA EXTENDING TO WITHIN 4.5 CM OF THE NEAREST (PROXIMAL OR DISTAL) MARGIN.**
4. **NO LYMPHATIC OR VENOUS INVASION IS IDENTIFIED.**
5. **THREE OF TWELVE LYMPH NODES DEMONSTRATE METASTATIC ADENOCARCINOMA WITH EXTRACAPSULAR EXTENSION IDENTIFIED.**
6. **HISTORY OF NEOADJUVANT TREATMENT IS UNKNOWN.**
7. **THE NONNEOPLASTIC MUCOSA DEMONSTRATES A SMALL HYPERPLASTIC POLYP.**

COMMENT: This tumor is consistent with TNM stage pT3N1MX.

Report #2

Histologic Type: Adenocarcinoma

Histologic Grade: Low grade

Primary Tumor (pT): pT3

Regional Lymph Nodes (pN): N1

Number LN examined: 12

Number LN involved: 3

Proximal Margin*: Free

Distal Margin*: Free

Circumferential (Radial) Margin*: Free

* A statement that all margins are negative is acceptable

Assessment:

Not synoptic. Multiple items appear on the same line. Not using the element:response format

Report #3

FINAL DIAGNOSIS:

COLON, RIGHT, RIGHT COLECTOMY:

INVASIVE ADENOCARCINOMA WITH THE FOLLOWING FEATURES:

1. SPECIMEN: THE SPECIMEN INCLUDES TERMINAL ILEUM, CECUM, AND ASCENDING COLON.
 2. PROCEDURE: RIGHT COLECTOMY.
 3. TUMOR SITE: RIGHT (ASCENDING) COLON.
 4. TUMOR SIZE: 4.6 X 4.0 X 0.8 CM.
 5. MACROSCOPIC TUMOR PERFORATION: ABSENT.
 6. HISTOLOGIC TYPE: ADENOCARCINOMA.
 7. HISTOLOGIC GRADE: LOW-GRADE (MODERATELY DIFFERENTIATED).
 8. MICROSCOPIC TUMOR EXTENSION: TUMOR INVADES MUSCULARIS PROPRIA.
 9. MARGINS:
 - a. PROXIMAL MARGIN: UNINVOLVED BY INVASIVE CARCINOMA.
 - b. DISTAL MARGIN: UNINVOLVED BY INVASIVE CARCINOMA.
-
- c. CIRCUMFERENTIAL (RADIAL) OR MESENTERIC MARGIN: UNINVOLVED BY INVASIVE CARCINOMA.
 - d. DISTANCE OF INVASIVE CARCINOMA FROM CLOSEST MARGIN: 1.8 CM FROM THE SEROSAL SURFACE.
10. VASCULAR (LARGE VESSEL) INVASION: NOT IDENTIFIED.
 11. LYMPHATIC (SMALL VESSEL) INVASION: NOT IDENTIFIED.
 12. LYMPH NODES: MULTIPLE LYMPH NODES (24) ARE NEGATIVE FOR TUMOR.
 13. PATHOLOGIC STAGING (pTNM): pT2, pN0, pMX.
 14. FOCAL DIVERTICULUM.

Report #3

Histologic Type: Adenocarcinoma

Histologic Grade: Low grade

Primary Tumor (pT): pT2

Regional Lymph Nodes (pN): pN0

Number LN examined: 24

Number LN involved: Multiple lymph nodes (24)
are negative

Proximal Margin*: Uninvolved

Distal Margin*: Uninvolved

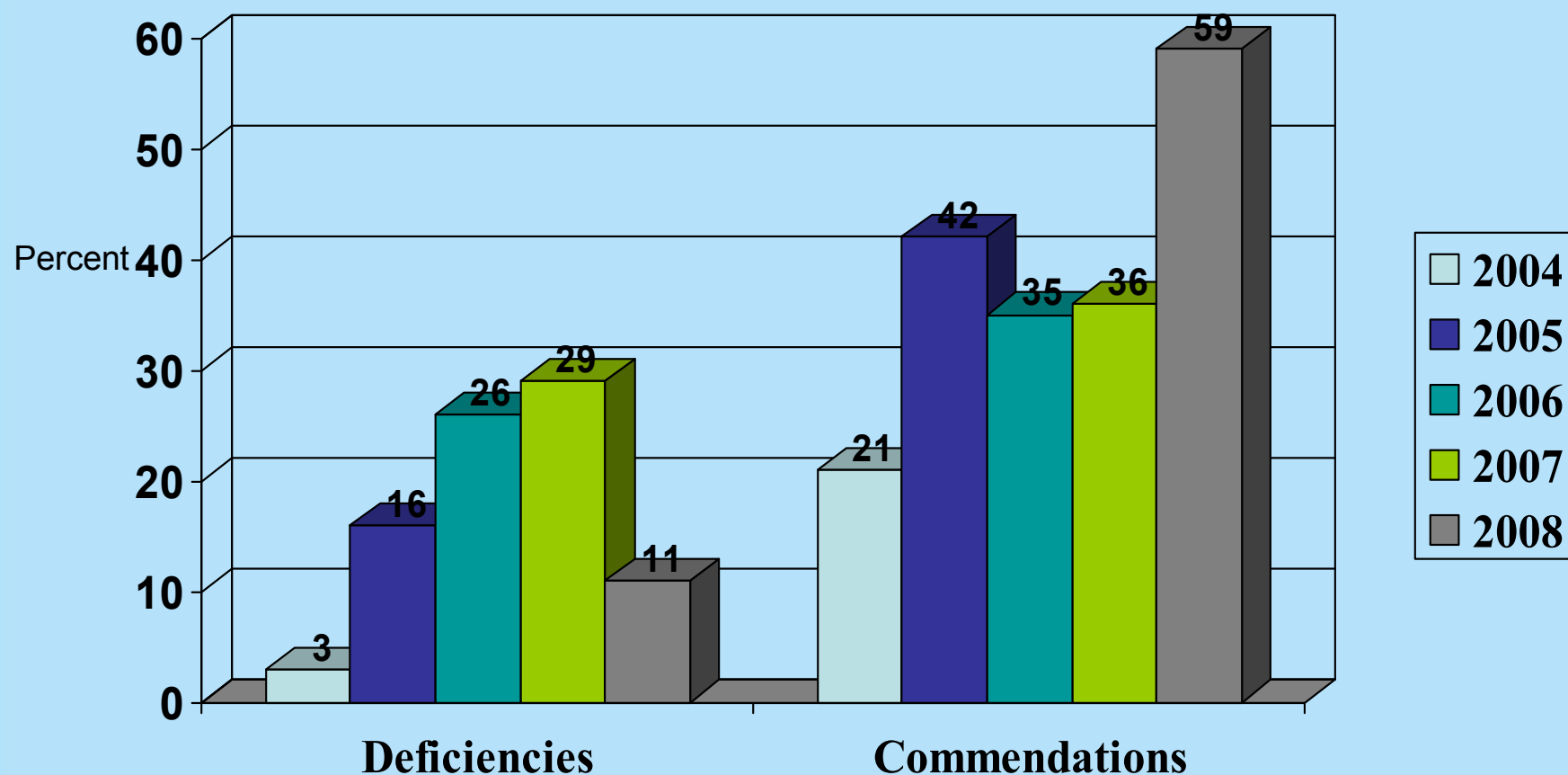
Circumferential (Radial) Margin*: Uninvolved

* A statement that all margins are negative is acceptable

Assessment:

Synoptic

Percentage Compliance with Standard 4.6 (Patient Guidelines) Deficiencies and Commendations 2004 - 2008 Surveys



The Importance of Standard 4.6

Emphasizes the importance of the entire cancer program's role in the survey process

Highlights collaborative, multidisciplinary efforts

Moves responsibility beyond registry staff

Links all departments of the cancer program

Call to action for cooperation within cancer program and between cancer programs for data capture and follow-up

Uses past performance as a means to foster quality improvement for cancer cases today