Definition of Synoptic Reporting

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

1. All required cancer data from an applicable cancer protocol must be included in the report and must be displayed using a format consisting of the required checklist item (required data element), followed by its answer (response), e.g. "Tumor size: 5.5 cm". Outline format without the paired required data element (RDE): response format is not considered synoptic.
2. Each diagnostic parameter pair (checklist RDE: response) is listed on a separate line or in a tabular format, to achieve visual separation.
   Note: the following are allowed to be combined on the same line:
   a. Anatomic site or specimen, laterality and procedure
   b. Pathologic Staging Tumor Node Metastasis (pTNM) staging elements
   c. Negative margins, as long as all negative margins are specifically enumerated
   For example:
   - Headers may be used to separate or group data elements
   - Any line may be indented to visually group related data elements or indicate a subordinate relationship
   - Text attributes (e.g., color, bold, font, size, capitalization/case, or animations) are optional
   - Blank lines may be used to separate data elements and group related elements
3. If multiple responses are permitted for the same data element, the responses may be listed on a single line.
4. 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 RDE and responses must be listed together in one location.
5. Additional items (not required for the CAP checklist) may be included in the synopsis but all required RDE must be present.
6. 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.

Additional Specifications and Options

- Data elements may be presented in any order in the report.
- Two data element names may not be listed on the same line, with the following exceptions:
  - Anatomic site or specimen, laterality, and procedure
  - Negative margins. Example: for colorectal carcinoma resection specimens, negative proximal, distal, and radial margins may be listed on one line
  - Pathologic staging: pT, pN, and pM categories may be listed on one line. It is not necessary to include definitions of the pT, pN, and pM categories in the report.

  Otherwise, only multiple values pertaining to the same data element may be listed on the same line.
- Diagnostic headlines may be included that contain some data elements in non-standard format (e.g., "INVASIVE CARCINOMA OF THE RIGHT BREAST.") However, if information in the headline includes a required element and the headline does not use the single line or multi-line format, the required information in the headline must also appear in the single line or multi-line format in the same report.

- Narrative comments may reference required or optional data elements. However, data elements and values that appear in narrative comment may not be properly abstracted and auditors are not to consider the data element and its value as having been included in a report, unless the information also appears in a properly formatted single line or multi-line statement.
- Data that are not listed as required or optional in an applicable cancer protocol may be included in any format. Examples include patient identification data (name, date of birth) or administrative data (report date, accession number)
- Required and optional data elements listed in the applicable cancer protocol may be combined into one report or broken up into separate reports. For example, separate paper reports or computer screens might be used to report histological and molecular findings, or to report gross and microscopic findings, or to report examinations of different specimens.

The CAP has developed a few examples of synoptic reporting (attached) for the use of the COC as training tools for COC inspectors. Sample reports 1-6 are examples of acceptable synoptic reporting; Sample reports 7 and 8 do not show acceptable synoptic style reporting. CAP recommends that CoC surveyors focus their evaluation of synoptic reporting only on definitive resection specimens and not biopsies at this time.

Synoptic Report Example #1

THYROID CARCINOMA

Procedure: Thyroidectomy
Specimen Integrity: Intact
Specimen Size: 4.3 x 2.5 x 1.5 cm Right; 4.0 x 2.5 x 1.6 Left

Tumor Focality: Unifocal, involves isthmus and right thyroid
Tumor Laterality: Right lobe and isthmus
Tumor Size: 2.5 cm
Histologic Type: Papillary thyroid carcinoma
Margins: Positive, right thyroid and isthmus
Lymph-Vascular Invasion: Not identified
Extrathyroidal Extension: Present

Pathologic Staging (pTNM):
- Primary Tumor (pT): pT4a
- Regional Lymph Nodes (pN): pN1
  - Number lymph nodes examined: 3
  - Number lymph nodes involved: 1
- Distant metastases (pM): pMn/a

Synoptic Report Example #2

CARCINOMA OF THE COLON OR RECTUM

Specimen: Terminal ileum, cecum, appendix, ascending colon
Other organs received: None
Procedure: Right hemicolectomy

Tumor site: Cecum
Tumor size: 8.5 x 4.9 x 3.6 cm
Macroscopic tumor perforation: Not identified

Histologic type: Adenocarcinoma
Histologic grade: High grade (poorly differentiated)

Microscopic tumor extension: Tumor penetrates to the surface of the visceral peritoneum (serosa)

Margins:
- Mesenteric: Involved by invasive carcinoma
- Proximal: Uninvolved by invasive carcinoma
- Distal: Uninvolved by invasive carcinoma

Treatment effect: No prior treatment

Lymph-vascular invasion: Present
Perineural invasion: Not identified

Tumor deposits (discontinuous extramural extension): Present
- Specify number of tumor deposits identified: 3

Pathologic staging (pTNM):
- Primary Tumor (pT): pT4a
- Regional Lymph Nodes (pN): pN1b
  - Number lymph nodes examined: 25
  - Number lymph nodes involved: 3
- Distant metastases (pM): pMn/a

Synoptic Report Example #3

CARCINOMA OF THE PROSTATE

Specimen type: Prostatectomy
Prostate weight: 47.20g
Prostate size: 4.5 x 4.0 x 4.0 cm
Histologic type: Adenocarcinoma
Histologic grade (Gleason pattern): 7
    Primary pattern: 3
    Secondary pattern: 4 with focal 5
    Total Gleason score: 7
Tumor Quantitation:
    Proportion (percent) of prostate involved by tumor: 15%
    Size of dominant nodule, if present, in mm: N/A
Extraprostatic extension: Absent
Seminal vesicle invasion: Absent
Margins: Negative for malignancy
Lymph-Vascular invasion: Absent
Treatment effect: Absent

Pathologic staging (pTNM):
        Primary Tumor (pT): pT2c
        Regional Lymph Nodes (pN): not applicable
                Number lymph nodes examined: 0
                Number lymph nodes involved: not applicable
        Distant metastases (pM): pMn/a

Synoptic Report Example #4

ENDOMETRIAL CARCINOMA

Specimen type (organs received): Uterus, bilateral ovaries and fallopian tubes, bilateral paraaortic lymph nodes
Procedure: Hysterectomy and bilateral salpingo-oophorectomy; lymphadenectomy
Lymph Node Sampling: Bilateral paraaortic
Specimen Integrity: Intact

Tumor Size: 1.3 cm
Histologic Type: Endometrioid adenocarcinoma
Histologic Grade: FIGO grade 2
Myometrial Invasion: Present
    Depth of invasion: 9 mm
    Myometrial thickness: 14 mm
Involvement of Cervix: Present (stroma)
Extent of Involvement of Other Organs: Bilateral paraaortic lymph nodes
Margins: Negative for malignancy

Lymphovascular Invasion: Absent.

Pathologic staging (pTNM [FIGO]):
  TNM descriptors: y (post-treatment)
    Primary tumor (pT) ypT2

    Regional lymph nodes (pN): ypN2
        Pelvic lymph nodes: no nodes submitted
        Para-aortic lymph nodes:
            Number of lymph nodes examined: 12
            Number of lymph nodes involved: 7

    Distant metastases (pM): pMn/a

Synoptic Report Example #5
(This example combines specimen, laterality, and procedure on one line, as allowed)

DUCTAL CARCINOMA IN SITU OF THE BREAST

Specimen, Laterality, Procedure: Partial breast, right, excision without wire-guided localization

Specimen Integrity: single intact specimen

Specimen Size (for excisions less than total mastectomy): 8.2 cm in greatest dimension

Lymph Node Sampling: No lymph nodes present

***Tumor Site**: Not specified

Estimated size (extent) of DCIS (greatest dimension using gross and microscopic evaluation): at least 3.8 cm

Histologic Type: Ductal carcinoma in situ.

***Architectural Patterns:** Solid

Nuclear Grade: Grade II (intermediate)

Necrosis: Present, focal (small foci or single cell necrosis)

Margins: Margin(s) uninvolved by DCIS
Distance from closest margin: 4 mm

*Specify margins:
*Distance from superior margin: 4 mm
*Distance from inferior margin: >10 mm
*Distance from medial margin: 6 mm
*Distance from lateral margin: >10 mm
*Distance from anterior margin: >10 mm
*Distance from posterior margin: >10 mm

Pathologic Staging (pTNM)
Primary Tumor (pT): pTis (DCIS):Ductal carcinoma in situ

Regional Lymph Nodes (pN): pNX (Cannot be assessed (not removed for pathologic study)

Distant Metastasis (pM): Not applicable

Synoptic Report Example #6
(This example uses the CAP Cancer Checklist, as allowed)

Gastrointestinal Stromal Tumor (GIST)

Based on AJCC/UICC TNM, 7th edition

Procedure
___ Excisional biopsy
_X__ Resection
Specify type (eg, partial gastrectomy): ____total gastrectomy_____
___ Metastatectomy
___ Other (specify): _____
___ Not specified

Tumor Site
Specify (if known): __gastric body_____
___ Not specified

Tumor Size
Greatest dimension: _5.3__ cm
*Additional dimensions: _4.8__ x _4.5__ cm
___ Cannot be determined (see "Comment")

Other Features
_X__ Unifocal
___ Multifocal
Specify number of tumors: _____
Specify size of tumors: _____

GIST Subtype
___ Spindle cell
___ Epithelioid
__X_ Mixed
___ Other (specify): _____

Mitotic Rate
Specify: __2_ /50 HPF

***Necrosis**
*__X_ Not identified
*___ Present
*Extent: ___%
*___ Cannot be determined

Histologic Grade
___ GX: Grade cannot be assessed
_x G1: Low grade; mitotic rate ≤5/50 HPF
___ G2: High grade, mitotic rate >5/50 HPF

Risk Assessment
___ None
___ Very low risk
_X_ Low risk
___ Intermediate risk
___ High risk
___ Overtly malignant/metastatic
___ Cannot be determined

Margins
___ Cannot be assessed
_X_ Negative for GIST
Distance of tumor from closest margin: _3.2 cm
___ Margin(s) positive for GIST
Specify margin(s): _____

AJCC/UICC **Pathologic Staging (pTNM),** 7th edition:

TNM Descriptors (if applicable)
___ m (multiple)
___ r (recurrent)
___ y (post-treatment)

Primary Tumor (pT)
___ pTX: Primary tumor cannot be assessed
___ pT0: No evidence for primary tumor
___ pT1: Tumor 2 cm or less
___ pT2: Tumor more than 2 cm but not more than 5 cm
_X_pT3: Tumor more than 5 cm but not more than 10 cm
___ pT4: Tumor more than 10 cm in greatest dimension

Regional Lymph Nodes (pN)
_X_ pN0: No regional lymph node metastasis
___ pN1: Regional lymph node metastasis
(In the absence of information on regional lymph node status, pN0 is appropriate; NX should not be used)

Distant Metastasis (pM)
_X_ Not applicable
___ pM1: Distant metastasis
*Specify site(s), if known: _____

***Ancillary Studies**

Immunohistochemical Studies
KIT (CD117)
__X Positive
___ Negative
Others (specify): _____
___ Not performed

Mutational Analysis
___ Performed
Specify result: _____
_X_ Not Performed

Preresection Treatment
_X_ No therapy
___ Previous biopsy or surgery
Specify: _____
___ Systemic therapy performed
Specify type: _____
___ Therapy performed, type not specified
___ Unknown

Unacceptable synoptic Report Example #7

Diagnosis:

Colon, right hemicolectomy:
Invasive adenocarcinoma, 3.4 x 3.0 cm involving muscularis propria
All margins negative
No lymphatic invasion
No metastatic tumor identified

NOT ACCEPTABLE AS SYNOPTIC STYLE REPORTING:
NOT ALL ELEMENTS ARE PRESENT AND DIAGNOSTIC PARAMETER PAIR IS ABSENT

Unacceptable Synoptic Report Example #8
Kidney

Diagnosis:

Kidney, Left (Radical Nephrectomy):

Clear cell adenocarcinoma, Furhman nuclear grade 3, 8.3 cm, unifocal involving upper pole of kidney and extending into the renal vein with the renal vein margin positive. Sarcomatoid features not identified.

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

NOT ACCEPTABLE AS SYNOPTIC STYLE REPORTING:
ALTHOUGH ALL REQUIRED ELEMENTS ARE PRESENT, INSUFFICIENT SYNOPTIC STYLE REPORTING