Cancer Surgery Standards PROGRAM
AMERICAN COLLEGE OF SURGEONS

CoC Operative Standard 5.5
Wide Local Excision for Primary Cutaneous Melanoma

March 3, 2022

Presentation created by CSSP Education Committee

facs.org/cssp

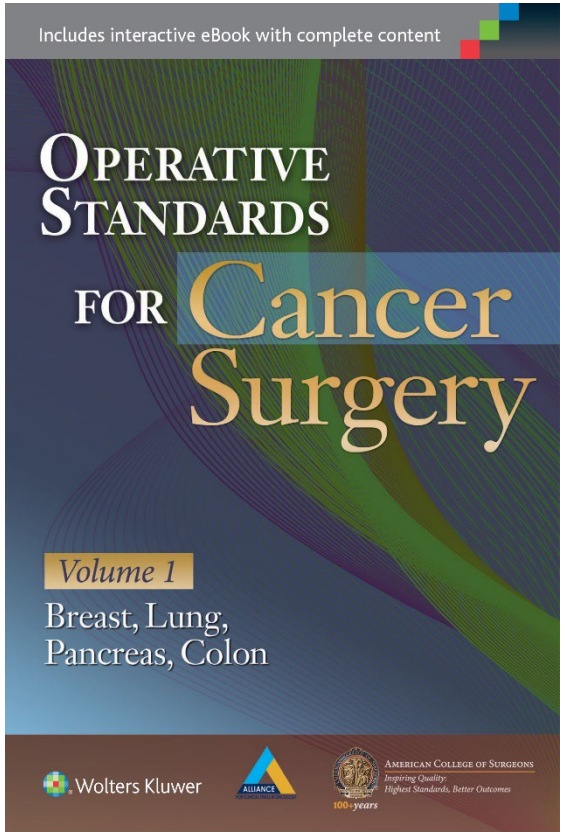
ACS AMERICAN COLLEGE OF SURGEONS

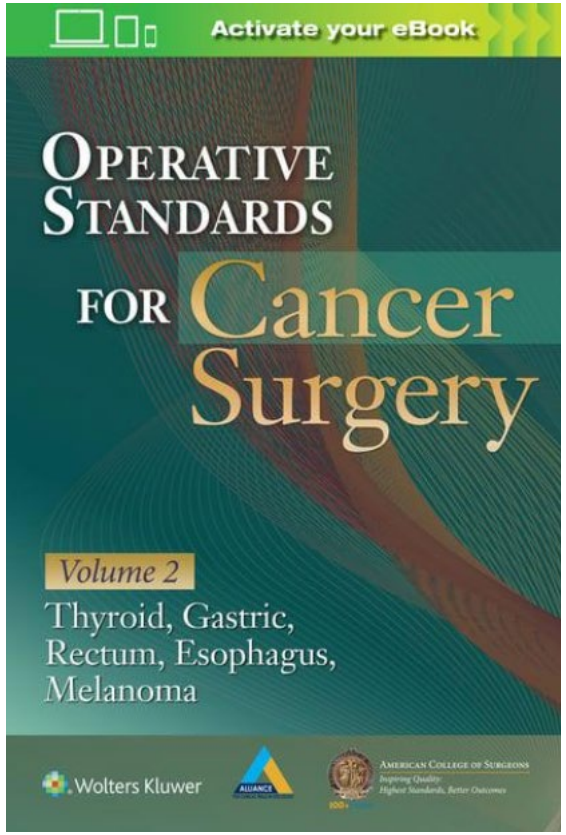
Elliot Asare, MD, MS, CMQ, FACS

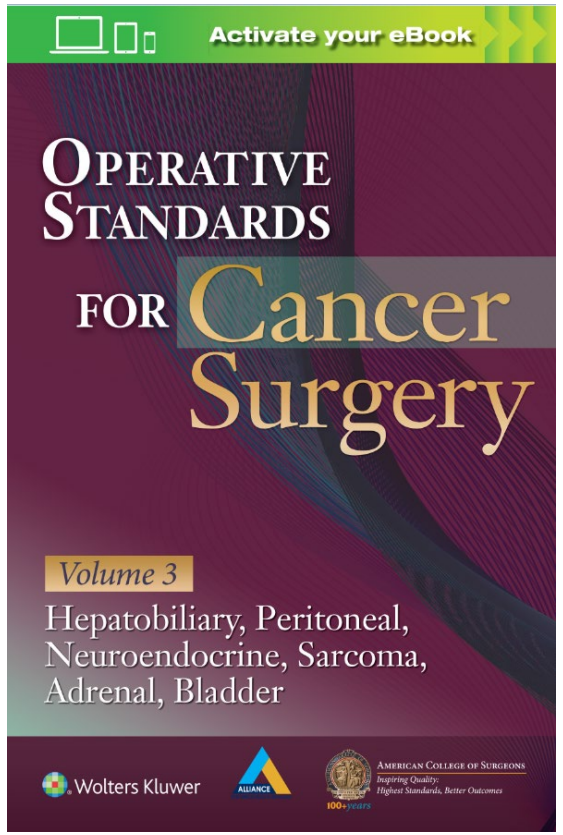
Assistant Professor of Surgical Oncology

University of Utah

Operative Standards for Cancer Surgery







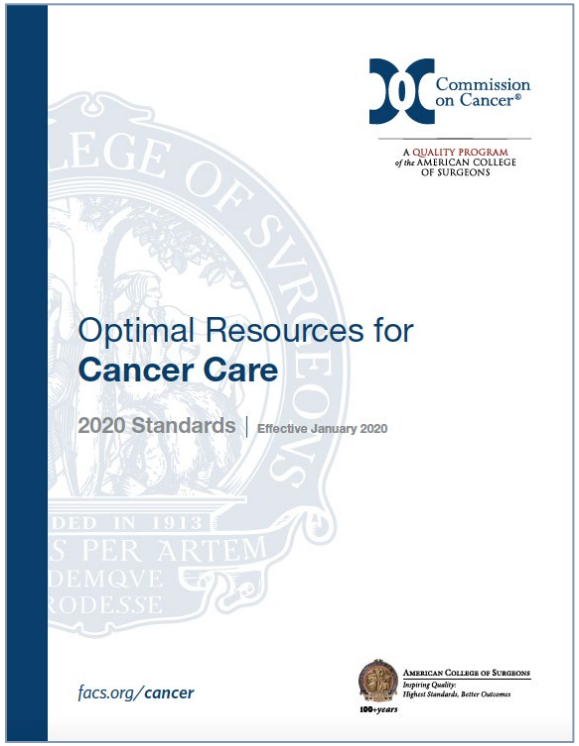
Coming soon!

facs.org/cssp

Cancer Surgery Standards PROGRAM
AMERICAN COLLEGE OF SURGEONS

ACS AMERICAN COLLEGE OF SURGEONS

The CoC Operative Standards



Standard	Disease Site	Procedure	Documentation
5.3	Breast	Sentinel node biopsy	Operative report
5.4	Breast	Axillary dissection	Operative report
5.5	**Melanoma**	**Wide local excision**	**Operative report**
5.6	Colon	Colectomy (any)	Operative report
5.7	Rectum	Mid/low resection (TME)	Pathology report (CAP)
5.8	Lung	Lung resection (any)	Pathology report (CAP)

Tina Hieken, MD, FACS

Elliot Asare, MD, FACS

Michael Cassidy, MD, FACS

Tawnya Bowles, MD, FACS

Sara Holton, CTR

Anthony Villano, MD

facs.org/cssp

Cancer Surgery Standards PROGRAM
AMERICAN COLLEGE OF SURGEONS

ACS AMERICAN COLLEGE OF SURGEONS

CoC Compliance Measures: Standard 5.5

1) All wide local excisions with **curative intent** must:
   - **Achieve standardized excision margins →** based on Breslow thickness
   - **Include the proper depth of excision →**
     - In situ disease = skin + superficial subcutaneous fat
     - Invasive melanoma = skin + subcutaneous tissue **down to the fascia**

2) All operative reports include the **required minimum elements in synoptic format**
- Curative intent
- Depth of original lesion
- Clinical margin used to excise
- Confirmation of depth of dissection

Timeline to Achieve Compliance: Standard 5.5

Standards 5.3, 5.4, 5.5, 5.6

Why excision margin as an operative standard?

- **Adequate margins = lower local recurrence**
  - Demonstrated in multiple randomized trials

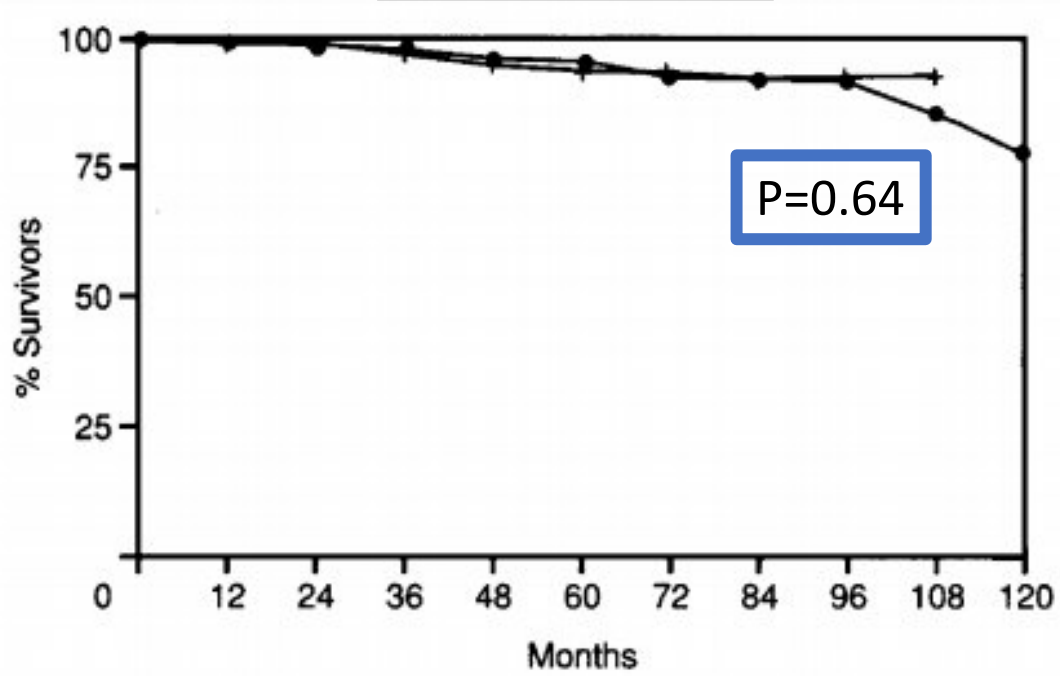
- Utilization of the smallest necessary margin = **minimized wound morbidity** and **improved patient quality of life**

Correct choice of excision margin improves oncologic outcomes

World Health Organization Trial (1991)

- Compared **1cm vs. 3cm margins** for ≤ 2mm melanoma
- No difference in DFS/OS at 90 months
- Implied that narrow 1cm margins is safe in 1-2mm melanoma

Overall survival

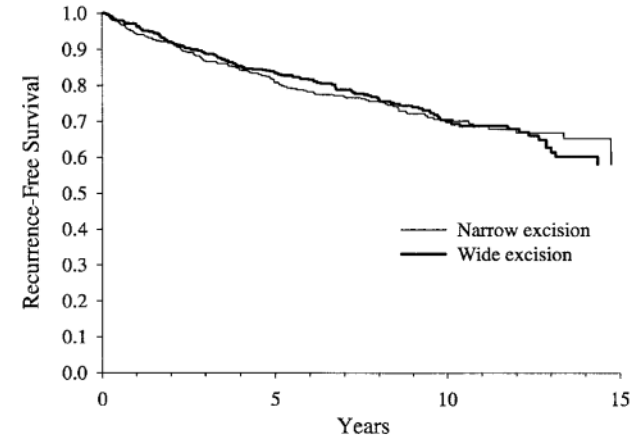


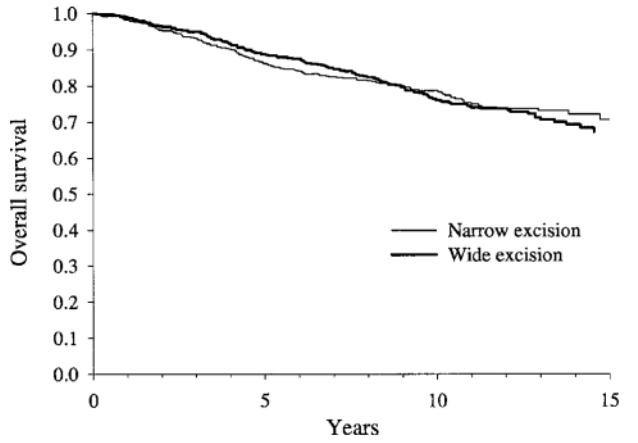
Veronesi and Cascinelli, *Arch Surg.*

Correct choice of excision margin improves oncologic outcomes

Swedish Melanoma Study Group Randomized Trial (2000)

- Compared **2cm vs. 5cm margins** for 0.8mm-2mm melanoma
- **No DFS/OS benefit** to margins >2cm for intermediate thickness melanoma
- Combined w/ the WHO data → **Informed the current standard** of 1-2cm margins for 1-2mm melanoma





Cohn-Cedermark G et al. 2000, *Cancer.*

Correct choice of excision margin improves oncologic outcomes

Study	Thickness included	Margins studied	DFS/OS	Notes
WHO Trial	≤ 2mm	**1cm** vs. 3cm	No diff	
Swedish Trial	0.8 – 2mm	**2cm** vs. 5cm	No diff	
Intergroup Trial	1-4mm	**2cm** vs. 4cm	No diff	
French Trial	≤ 2mm	**2cm** vs. 5cm	No diff	
UKSMG Trial	>2mm	1cm vs. 3cm	No diff	+14% LR for 1cm @5yr

LR = local recurrence

Current CoC standards for margin

Breslow Thickness	WLE Margin
Melanoma *in situ*	≥ 5mm
< 1mm	1cm
1-2mm	1-2cm
≥ 2mm	2cm

CoC Compliance Measures: Standard 5.5

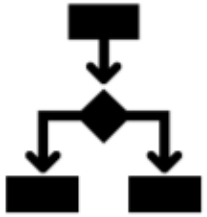
1) All wide local excisions with **curative intent** must **achieve standardized excision margins** based on **Breslow thickness**

2) All operative reports include the **required minimum elements in synoptic format**

- Documentation of curative intent
- Depth of original lesion
- Clinical margin used to excise
- Confirmation of depth to fascia

What is synoptic reporting?

Standardized data elements organized as a **structured checklist or template**



Each data element's value is "filled in" using a **pre-specified format** to ensure interoperability of information

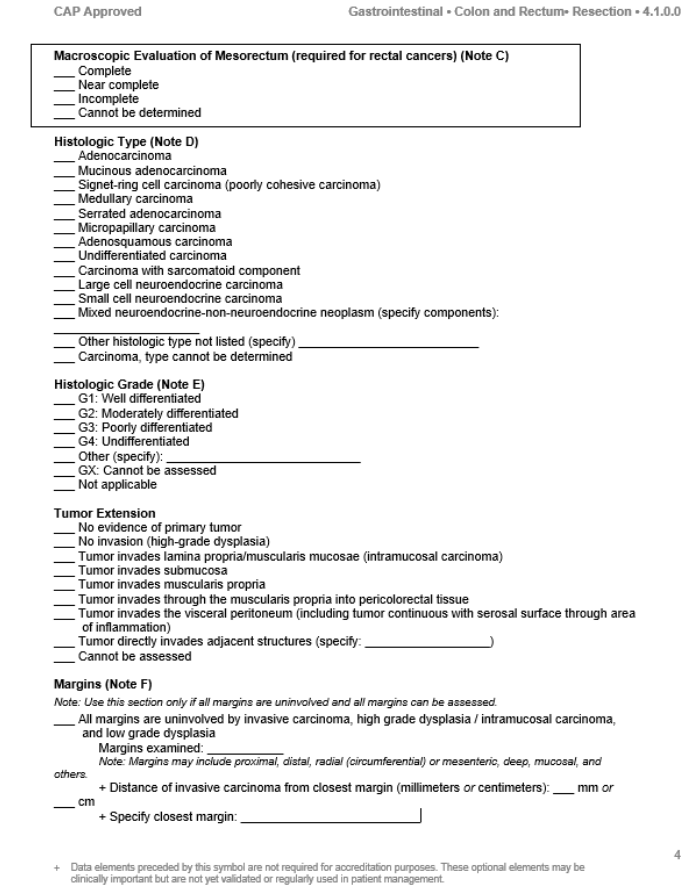
- The information being sought is standardized
- The options for each variable are constrained to a pre-defined set of responses

Synoptic reports allow information to be easily **collected, stored, and retrieved**

https://www.facs.org/-/media/files/quality-programs/cancer/cssp/coc_standards_5_3_5_6_synoptic_operative_report_requirements.ashx

Synoptic reporting has been used effectively

- **College of American Pathology synoptic reports** have been in use for some time
- Improved efficiency of documentation and standardized the language
- As surgeons, we have all reaped the benefits of this initiative



CAP Approved Gastrointestinal • Colon and Rectum• Resection • 4.1.0.0

Macroscopic Evaluation of Mesorectum (required for rectal cancers) (Note C)
___ Complete
___ Near complete
___ Incomplete
___ Cannot be determined

Histologic Type (Note D)
___ Adenocarcinoma
___ Mucinous adenocarcinoma
___ Signet-ring cell carcinoma (poorly cohesive carcinoma)
___ Medullary carcinoma
___ Serrated adenocarcinoma
___ Micropapillary carcinoma
___ Adenosquamous carcinoma
___ Undifferentiated carcinoma
___ Carcinoma with sarcomatoid component
___ Large cell neuroendocrine carcinoma
___ Small cell neuroendocrine carcinoma
___ Mixed neuroendocrine-non-neuroendocrine neoplasm (specify components): _____
___ Other histologic type not listed (specify) _____
___ Carcinoma, type cannot be determined

Histologic Grade (Note E)
___ G1: Well differentiated
___ G2: Moderately differentiated
___ G3: Poorly differentiated
___ G4: Undifferentiated
___ Other (specify): _____
___ GX: Cannot be assessed
___ Not applicable

Tumor Extension
___ No evidence of primary tumor
___ No invasion (high-grade dysplasia)
___ Tumor invades lamina propria/muscularis mucosae (intramucosal carcinoma)
___ Tumor invades submucosa
___ Tumor invades muscularis propria
___ Tumor invades through the muscularis propria into pericolorectal tissue
___ Tumor invades the visceral peritoneum (including tumor continuous with serosal surface through area of inflammation)
___ Tumor directly invades adjacent structures (specify: _____)
___ Cannot be assessed

Margins (Note F)
Note: Use this section only if all margins are uninvolved and all margins can be assessed.
___ All margins are uninvolved by invasive carcinoma, high grade dysplasia / intramucosal carcinoma, and low grade dysplasia
Margins examined: _____
Note: Margins may include proximal, distal, radial (circumferential) or mesenteric, deep, mucosal, and others.
+ Distance of invasive carcinoma from closest margin (millimeters *or* centimeters): ___ mm *or* ___ cm
+ Specify closest margin: _____

4

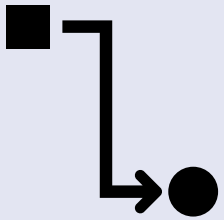
+ Data elements preceded by this symbol are not required for accreditation purposes. These optional elements may be clinically important but are not yet validated or regularly used in patient management.

https://www.facs.org/-/media/files/quality-programs/cancer/cssp/coc_standards_5_3_5_6_synoptic_operative_report_requirements.ashx

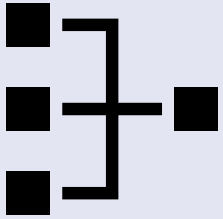
Why a transition to synoptic reporting?

Improves **accuracy** of documentation

Improves **efficiency** of data entry



Reduces variability in care



Improves quality of cancer care

https://www.facs.org/-/media/files/quality-programs/cancer/cssp/coc_standards_5_3_5_6_synoptic_operative_report_requirements.ashx

How will compliance w/ synoptic operative reporting be assessed?

- Compliance will be based on randomly assessed operative reports

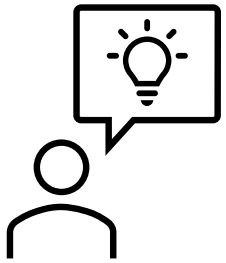
- Each operative note must have the **four required synoptic elements for standard 5.5** (at right)

Element	Response Options
Operation performed with curative intent.	Yes; No.
Original Breslow thickness of the lesion	Melanoma *in situ* (MIS); _._ mm *(to the tenth of a millimeter).*
Clinical margin width *(measured from the edge of the lesion or the prior excision scar*	0.5 cm; 1 cm; 2 cm; Other: __ cm due to cosmetic/anatomic concerns; Other *(with explanation).*
Depth of excision	Full-thickness skin/subcutaneous tissue down to fascia (melanoma); Only skin and superficial subcutaneous fat (melanoma *in situ*); Other *(with explanation).*

https://www.facs.org/-/media/files/quality-programs/cancer/cssp/coc_standards_5_3_5_6_synoptic_operative_report_requirements.ashx

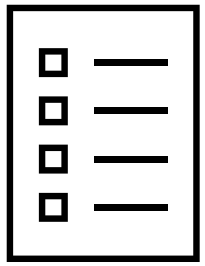
How can my program meet synoptic reporting requirements?

Institutional Basic Synoptic Templates



Commercial Options

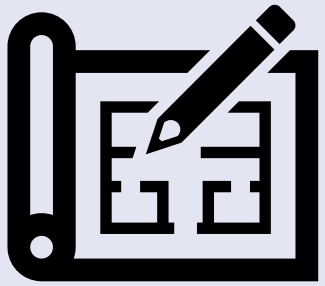
Fillable PDF Forms



https://www.facs.org/quality-programs/cancer/coc/standards/2020/operative-standards/implementation-options

CSSP Resources for Synoptic Operative Reporting

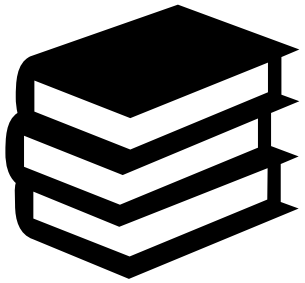
Operative Standards Toolkit



Up to date information on all standards, resources, and CSSP news

https://www.facs.org/quality-programs/cancer/cssp/resources/operative-standards-toolkit

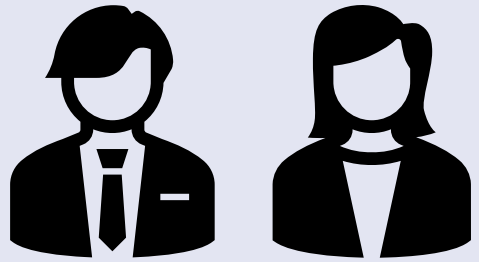
Quick Reference Guide



Composite of all required fields for synoptic reports

https://www.facs.org/-/media/files/quality-programs/cancer/cssp/coc_standards_5_3_5_6_synoptic_operative_report_requirements.ashx

Commercial Options



Vendors offering EMR-integrated tools to meet synoptic reporting requirements

https://www.facs.org/quality-programs/cancer/coc/standards/2020/operative-standards/commercial

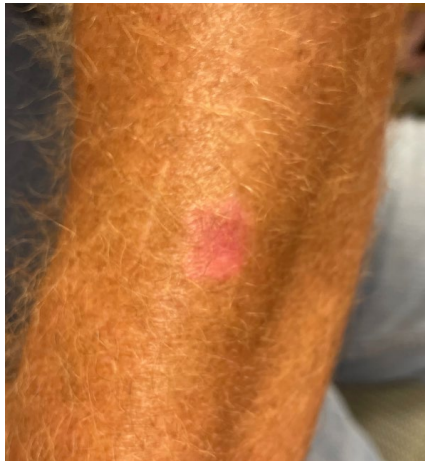
Case Eligibility for Standard 5.5

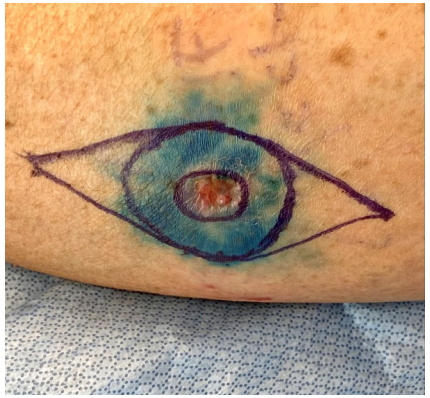
Photos courtesy of Dr. Jeffrey Farma, MD, FACS and Dr. Anthony M. Villano, MD

1) Primary **cutaneous** melanoma
   - Mucosal, ocular, and subungual melanomas are excluded

2) All Wide-Local Excisions

3) Operation is performed for **curative intent**





Guidelines for Self-Auditing

- Using the Cancer Registry database - Pull cases within the scope of the standard with the following criteria:
  - Patient identifiers (MRN, Accession year [2021 and >], Class of case)
  - Surgeon identifiers (NPI, physician code, etc.)
  - Primary site (Skin, C44.0 – C44.9)
  - Histology code range 8720 – 8780
  - Surgery codes 30 – 90 from STORE
- Evaluate operative reports for measures of compliance
- Plan and implement interventions to address any gaps in compliance

Experience with Implementing Standard 5.5

- Intermountain Healthcare- 24 hospitals in Utah/Idaho

- Key issues
  - EMR integration for synoptic reports
  - Ease of gathering data
  - Educating other specialists treating melanoma (Dermatology, Surgical Subspecialists)
  - Empowering patients/patient education

EMR integration

- iCentra Power chart
- Templated operative note
- Operative note named “Melanoma Operative Note”
- Drop down options for the 4 elements
- Manual chart review still necessary

Colorectal Surgical Note example

Estimated Blood Loss:

Wound Classification:

Colon Bundle Components:

Elective Case: [Yes/No]
Antibiotic Bowel Prep done: [Yes/No]
Laxative Bowel Prep done: [Yes/No]
Changed to closing tray after final anastomosis: [Yes/No]
Alcohol based prep used on abdomen and allowed to dry 3 minutes: [Yes]
Wound protector utilized: [Yes/No]

Infection Present at time of Surgery:

Infection Present At Time Of Surgery (PATOS): [Yes/No]

If yes, please indicate which of the following are present and ***include these ex***
Intra-abdominal Infection present: [Yes/No]
Abscess present: [Yes/No]
Purulence or Pus present: [Yes/No]
Septic Peritonitis: [Yes/No]
Feculent Peritonitis: [Yes/No]

Drains:

Educating surgeons and other specialists

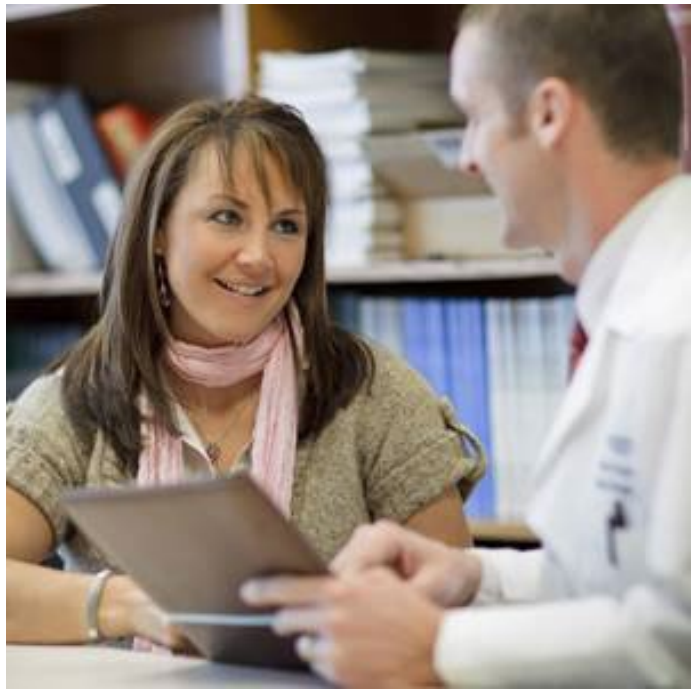
- General Surgery/Surgical Oncology education
  - Monthly section meetings; educating surgical leadership
  - Presentation at multidisciplinary tumor boards

- Other specialists treating melanoma
  - Dermatology/Mohs Dermatologists
  - Otolaryngology
  - Plastic Surgery
  - Orthopedic Oncology

Empowering patients

- Direct to patient education on surgical standards of melanoma excision

- Possible avenues
  - Internet and social media
  - Printed material in medical offices
  - Additional input from patient advocates/support groups



Frequently Asked Questions (FAQs)

Will wide local excisions performed by a dermatologist or plastic surgeon in offices located on our CoC hospital's campus be within the scope of Standard 5.5?

- We recommend identifying whether the office location in question is included in your accredited hospital's Tax ID. If the office where the WLE was performed is included in your hospital's accreditation, and the case would be submitted for your hospital's analytic caseload, then the WLE would be included in the scope of Standard 5.5. This is regardless of who is performing the procedure.

FAQs (continued)

For melanoma in situ, would margins of any size greater than 5 mm still fulfill this standard?

- There is no deficiency for having too large of a margin for melanoma in-situ; however, evidence-based recommendations would not recommend a gross margin at the time of resection over 1cm.

FAQs (continued)

If a surgeon takes a margin wider than recommended in Standard 5.5, is this a problem or issue with compliance? For example, a tumor with a 0.6mm Breslow thickness having a 2 cm inked/excised margin when the standard only recommends 1 cm margin.

- Clinical margin width for wide local excision should be 1 cm for invasive melanomas less than or equal to 1 mm in thickness. A 2 cm margin would therefore not fulfill this requirement.
- Overtreatment should be avoided and, in the rare situation when deviation from the standard is judged to be the best option for care, we encourage the surgeon to document why a wider margin was chosen. However, margins wider than those set by Standard 5.5 are not compliant.

FAQs (continued)

What if the depth of melanoma was deeper on the final pathology than on the initial biopsy diagnosing the melanoma?

- Standard 5.5 was revised in 2021 to clarify this definition. The margins required for this standard are based on the Breslow thickness of the primary tumor as indicated on the initial biopsy pathology report.

Tina Hieken, MD, FACS

Elliot Asare, MD, FACS

Michael Cassidy, MD, FACS

Tawnya Bowles, MD, FACS

Sara Holton, CTR

Anthony Villano, MD

facs.org/cssp

Cancer Surgery Standards PROGRAM
AMERICAN COLLEGE OF SURGEONS

ACS AMERICAN COLLEGE OF SURGEONS

Special thanks

Moderator:
Tina J. Hieken, MD, FACS

Panelists:
Elliot A. Asare, MD, MS, CMQ, FACS
Tawnya L. Bowles, MD, FACS
Sara Holton, CTR
Anthony M. Villano, MD
Michael R. Cassidy, MD, FACS

CSSP Leadership & Staff:
CSSP Chair: Matthew H.G. Katz, MD FACS
CSSP Vice-Chair: Kelly K. Hunt, MD, FACS
CSSP Senior Manager: Amanda Francescatti, MS
CSSP Administrator: Linda Zheng
CSSP Program Coordinator: Clarissa Orr

CoC Leadership:
CoC Chair: Timothy W. Mullett, MD, FACS

CSSP Education Committee
Committee Chair: Mediget Teshome, MD, MPH, FACS
Committee Vice-Chair: Timothy J. Vreeland, MD, FACS

ACS Cancer Programs Staff:
Asa Carter: Senior Manager, Education & Training
Chantel Ellis: Administrator, Education & Training

Questions? *cssp@facs.org*

Resources

ACS Cancer Surgery Standards Program (CSSP)

www.facs.org/cssp

Operative Standards Toolkit

www.facs.org/opstandardtoolkit

References

1) Veronesi U, Cascinelli N. Narrow excision (1-cm margin). A safe procedure for thin cutaneous melanoma. Arch Surg. 1991 Apr;126(4):438-41. doi: 10.1001/archsurg.1991.01410280036004. PMID: 2009058.

2) Cohn-Cedermark G, Rutqvist LE, Andersson R, Breivald M, Ingvar C, Johansson H, Jönsson PE, Krysander L, Lindholm C, Ringborg U. Long term results of a randomized study by the Swedish Melanoma Study Group on 2-cm versus 5-cm resection margins for patients with cutaneous melanoma with a tumor thickness of 0.8-2.0 mm. Cancer. 2000 Oct 1;89(7):1495-501. PMID: 11013363.

3) Balch CM, Soong SJ, Smith T, Ross MI, Urist MM, Karakousis CP, Temple WJ, Mihm MC, Barnhill RL, Jewell WR, Wanebo HJ, Desmond R; Investigators from the Intergroup Melanoma Surgical Trial. Long-term results of a prospective surgical trial comparing 2 cm vs. 4 cm excision margins for 740 patients with 1-4 mm melanomas. Ann Surg Oncol. 2001 Mar;8(2):101-8. doi: 10.1007/s10434-001-0101-x. PMID: 11258773.

4) Khayat D, Rixe O, Martin G, Soubrane C, Banzet M, Bazex JA, Lauret P, Vérola O, Auclerc G, Harper P, Banzet P; French Group of Research on Malignant Melanoma. Surgical margins in cutaneous melanoma (2 cm versus 5 cm for lesions measuring less than 2.1-mm thick). Cancer. 2003 Apr 15;97(8):1941-6. doi: 10.1002/cncr.11272. PMID: 12673721.

5) Hayes AJ, Maynard L, Coombes G, Newton-Bishop J, Timmons M, Cook M, Theaker J, Bliss JM, Thomas JM; UK Melanoma Study Group; British Association of Plastic; Reconstructive and Aesthetic Surgeons, and the Scottish Cancer Therapy Network. Wide versus narrow excision margins for high-risk, primary cutaneous melanomas: long-term follow-up of survival in a randomised trial. Lancet Oncol. 2016 Feb;17(2):184-192. doi: 10.1016/S1470-2045(15)00482-9. Epub 2016 Jan 12. PMID: 26790922; PMCID: PMC4737890.

6) Katz M, et al. Operative Standards for Cancer Surgery. Available from: VitalSource Bookshelf, Wolters Kluwer Health, 2018.