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Webinar on Implementation of CoC Operative Standards

March 28, 2022

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Webinar Logistics

- All participants are muted during the webinar

- Questions – including technical issues you may be experiencing – should be submitted through the question pane

- Questions will be answered as time permits; additional questions and answers will be posted on the website

- Please complete the post-webinar evaluation you will receive via email

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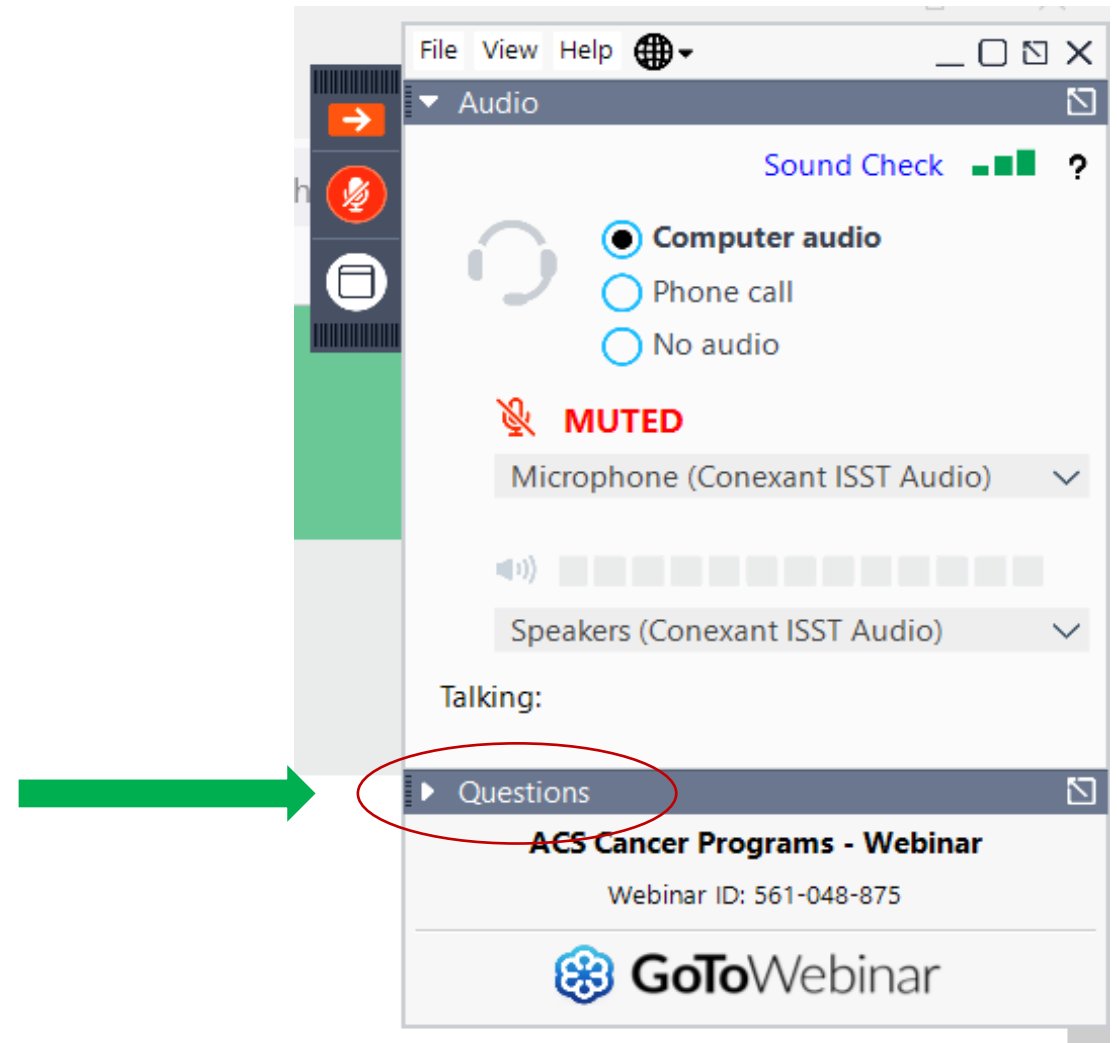
Speakers

Kristan Staudenmayer, MD, FACS
Stanford University Medical
Center
Vice-Chair, CSSP Implementation
& Integration Committee

Mediget Teshome, MD, FACS
MD Anderson Cancer Center
Chair, CSSP Education Committee

Timothy J. Vreeland, MD FACS
Brooke Army Medical Center
CSSP Education Committee Vice-Chair

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Panel Moderators

Michael Archer, DO FACS

Assistant Professor

Upstate University Hospital

Ingrid Lizarraga, MBBS FACS

Associate Professor

University of Iowa Hospitals and Clinics

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Panelists

Christine Colarusso, CTR

Laura Dominici, MD FACS

Lisa Ganem, CTR

Marc Mandel, MD FACS

Mazin Shackour, MD FACS

Denise Vose, R.T.(R)(T)

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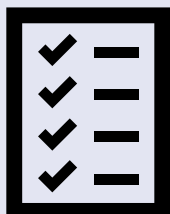ACS / AMERICAN COLLEGE OF SURGEONS

Introduction

Timothy Vreeland, MD FACS

Why are Surgery Standards different?

- First time the **conduct of the surgery** is being scrutinized by CoC standards

- Many surgeons have **limited/no experience** with CoC standards and, therefore, **little knowledge** of the standards

- Imperative that we get buy in from surgeons for these standards

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Definition of synoptic reporting

Standardized data elements organized as a **structured checklist or template**
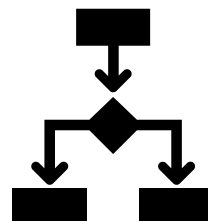
Each data element's value is "filled in" using a **pre-specified format** to ensure interoperability of information

➢ 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**

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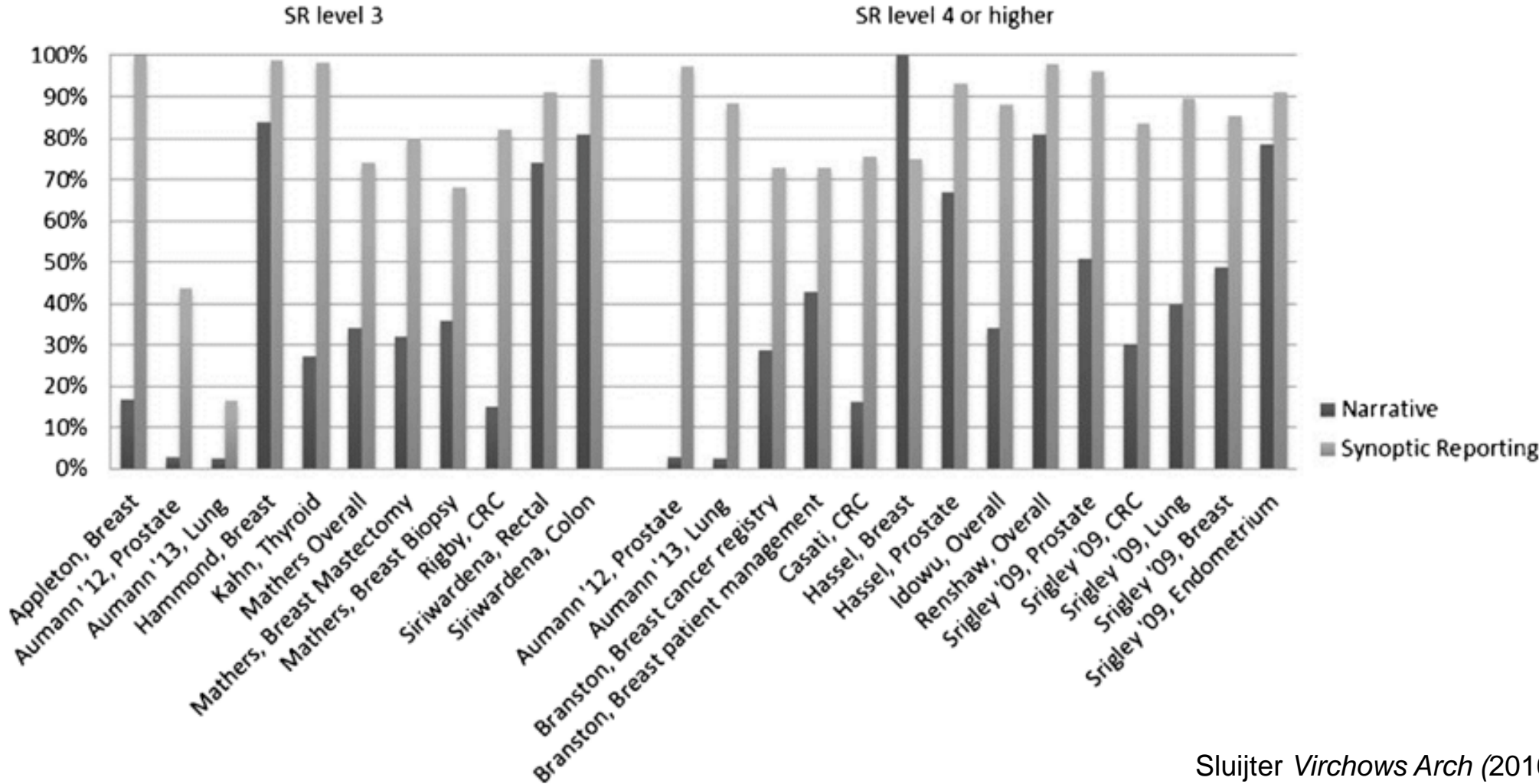
Synoptic Reporting vs. Narrative Reporting

Synoptic reporting…

- **Always** uses pre-determined data fields and pre-determined responses

- **Always** uses standardized terminology

- Presented in **checklist** format

- **Always** allows for discrete data capture
  - Information is formatted so it can be collected, stored, and is easily retrievable for data repositories
  - Can automatically populate data from the EHR

Narrative reporting…

- May use pre-determined data fields and pre-determined responses

- May use standardized terminology

- Presented in a **prose** format

- Prone to **omission** of necessary data and **inconsistencies** in language and formatting

- **MAY** allow for discrete data capture

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Accuracy of Pathology Reports – Systematic Review

Sluijter *Virchows Arch (*2016) 268:639-649

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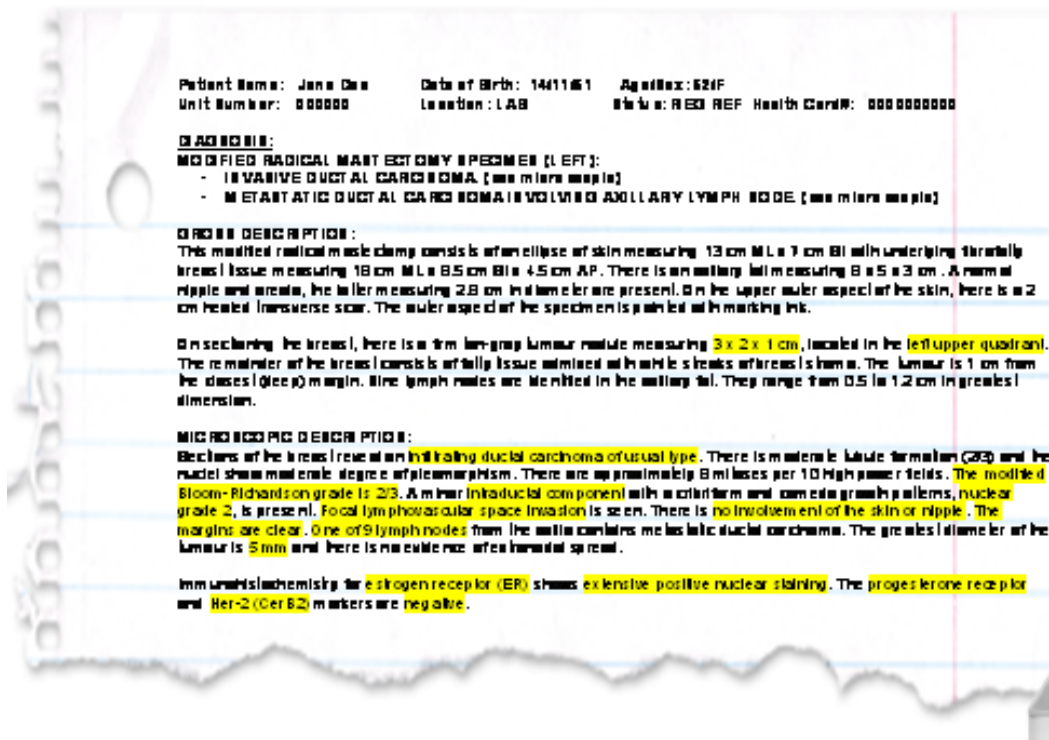PROGRAM
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Synoptic vs. Narrative Reports

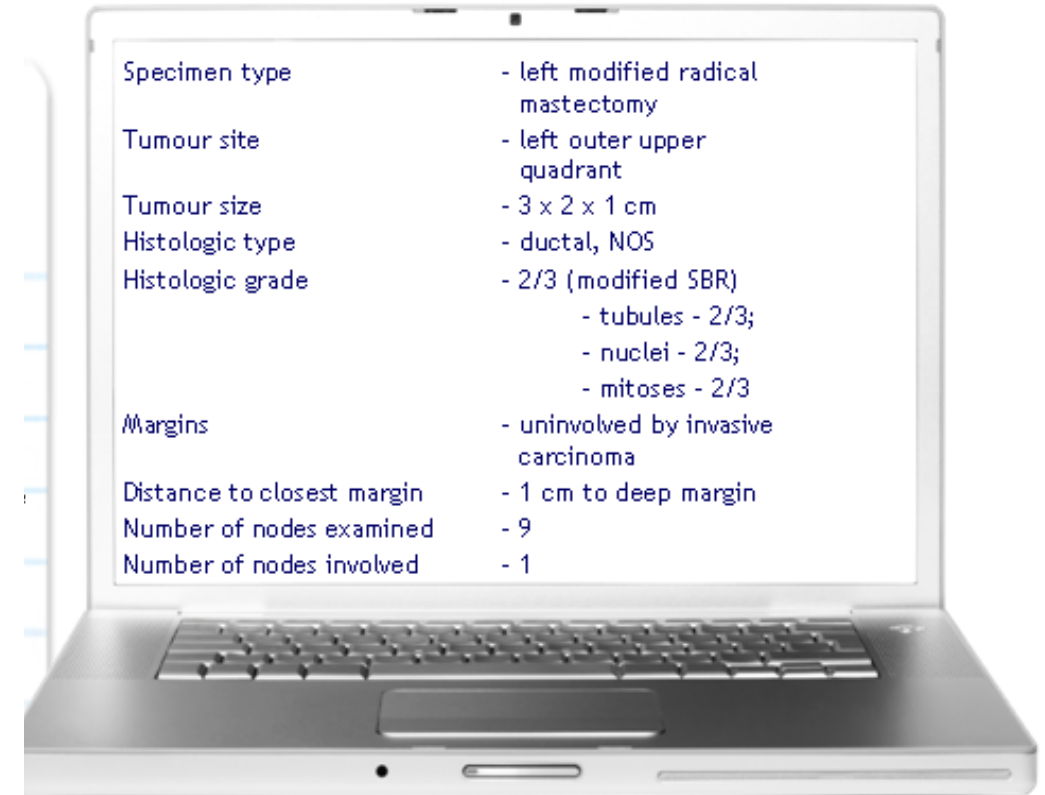| Outcome or Subgroup	# Studies	N	Statistical Method	Effect Estimate – Synoptic v. Narrative
Efficiency				
Time to complete (min)	6	891	Mean Difference (95% CI)	−0.86 m [-1.17, −0.55]
Time to verified report in EMR (hours)	1	336	Mean Difference	−373.53 h
Quality				
Accuracy	1	208	Mean Difference (95% CI)	40.60% [38.54, 42.66]
Reduction Critical Error (% of op notes)	1	110	Mean Difference	32.13%
Reduction Error Rate (% of op notes)	1	110	Mean Difference	75.26%
Validity	1	208	Mean Difference (95% CI)	3.40% [2.02, 4.78]
Cost ($/note)	2	72	Mean Difference	-$8.27

Stogryn et al., Am J Surg 2019. 218(3): 624-30.

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Shoe on the other foot…

Narrative Path Report

Diagram courtesy of Cancer Care Ontario

CAP Synoptic Report

Specimen type	- left modified radical mastectomy
Tumour site	- left outer upper quadrant
Tumour size	- 3 x 2 x 1 cm
Histologic type	- ductal, NOS
Histologic grade	- 2/3 (modified SBR)
	- tubules - 2/3;
	- nuclei - 2/3;
	- mitoses - 2/3
Margins	- uninvolved by invasive carcinoma
Distance to closest margin	- 1 cm to deep margin
Number of nodes examined	- 9
Number of nodes involved	- 1

What is the value of Synoptic Operative Reporting?

- Improve accuracy of documentation

- Improve efficiency of data entry and data abstraction

- Reinforce education (can emphasize the critical elements of oncologic operations)

- Reduce variability in care

- Improve quality of cancer care

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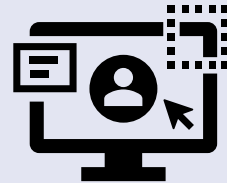# Synoptic Operative Reporting Summary

Definition

Standardized data elements organized as a structured checklist or template

Each data element's value is filled in using a pre-specified format

Benefits

Synoptic reports allow information to be easily collected, stored, & retrieved, resulting in...

- Improved accuracy
- Improved efficiency of entry
- Improved efficiency of data abstraction
- Reinforced education
- Reduced variability

...thereby increasing the
quality of cancer care

Future State

Standardization of documentation

Interoperability of information
➢ Advanced analytics
➢ Greater availability for research
➢ Real-time data analysis
➢ Streamlined processes

Integration into EHR

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Commission on Cancer Operative Standards 2020

Synoptic Operative Reporting
Now and in the Future

4 EMR-integrated SORs allowing for data sharing across groups, automated data abstraction, and improved quality

3 Universal implementation of structured SORs

2 Comprehensive set of SOR content developed covering all disease sites represented in surgical oncology

1 First phase of synoptic operative report (SOR) development and implementation via local or third-party vendor solutions

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Commission on Cancer®

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Inspiring Quality:
Highest Standards, Better Outcomes
100+years

SOR Implementation Survey

- Survey open to CoC accredited cancer programs 1/6-1/21

- Seeking information about sites' synoptic operative reporting solution and implementation experience

- 43 responses total

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SOR Survey Results- Demographics

- Respondent Role
  - 33% Cancer Liaison Physicians
  - 21% Certified Tumor Registrars
  - 10% Cancer Committee Chair
  - 36% Other
- EMR Used
  - 63% Epic
  - 23% Cerner
  - 7% Meditech
  - 8% Other

- Type of Institution
  - 30% Comprehensive Community Cancer Program
  - 16% Community Cancer Program
  - 14% Academic Comprehensive Cancer Program
  - 14% NCI-Designated Comprehensive Cancer Center Program
  - 12% Integrated Network Cancer Program
  - 14% Other

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SOR Survey Results- In Practice

Disease Sites Covered

- Breast
- Colon
- Skin (Melanoma)
- Lung
- Rectum
- Thyroid

Solutions

- 84% Internally-developed checklist using auto-text
  - smart phrase/smart list
- 17% Other
  - Dictation
  - digital form
  - checklist

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SOR Survey Results- Education

- Email/written communications to surgeons including special communications to surgeons from CLPs, surgical specialty leads, department chairs

- Presented during tumor board/cancer committee meetings, at surgical grand rounds, and department of surgery meetings

- Scheduled separate training sessions

- Shared resources from Operative Standards Toolkit

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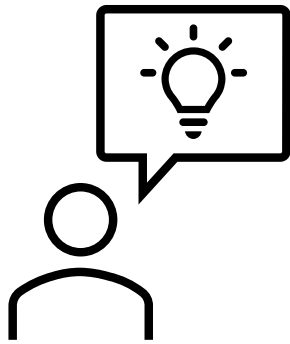
SOR Survey Results- Barriers

- General lack of awareness (e.g., of synoptic reporting or of the CoC Operative Standards)
- Surgeon Buy-In
  - Initial surgeon buy-in (e.g., to synoptic reporting or importance of the CoC Operative Standards)
  - Consistent use of synoptic operative reporting tools by surgeons
- IT issues
  - Limited local IT resources/bandwidth
  - Challenges with EMR software integration
- Lack of clarity on synoptic reporting implementation options
- Administrative buy-in (e.g., regulatory committees)

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Current Options for Synoptic Operative Reporting

Create Your Own Basic Synoptic Templates

- Use required elements and responses from the CoC 2020 Standards manual
- Can be done using smart phrases/smart tools to supplement a traditional narrative operative report
- Can be integrated into an existing smartform or synoptic report within EMR
- Reporting format must be uniform across all surgeons at the facility

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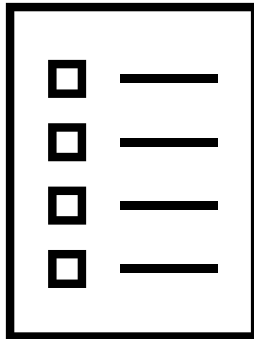# Current Options for Synoptic Operative Reporting

License Third-Party Vendor Tools

- Includes all data elements and responses from comprehensive CSSP synoptic operative reporting templates, including elements required for CoC accreditation
- Fully developed tool supported by vendor
- Current vendor list available on ACS website

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Current Options for Synoptic Operative Reporting

Use Fillable PDF Forms

- Includes only the required elements and responses from the CoC 2020 Standards manual

- Downloads as blank PDF from the Standards Resource Library

- Supplements a traditional narrative operative report

- Stop-gap measure to allow programs to ensure compliance with synoptic formatting requirements

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FirstHealth of the Carolinas
Pinehurst, NC

- Category of cancer program: Comprehensive Community Cancer Center

- Number of surgeons: 14

- Caseload: 1500+

- Synoptic operative reporting solution: EPIC Smart Phrases

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Opportunities & Challenges to Physician Buy-In

Challenge	Opportunity
Engagement	Physician Champion
Perception- Intent of Standard	Education
Perception- Workflow Impact	Review of Technology Solution and Ongoing Involvement in Development and Implementation
Sustainable and Scalable Process	Designated EPIC and CoC Standard Contact

WVU Eastern Division, Berkeley and Jefferson

- Category of cancer program: Community Hospital

- Number of surgeons:9 General Surgeons

- Caseload: Variable

- Synoptic operative reporting solution: Smart Phrases.

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WVU Eastern Division, Berkley and Jefferson Our Implementation Pathway

1. Met with Providers, provided options for synoptic reporting. All favored smart phrases.

2. Reached out to IT, created smart phrases.

3. Compliance monitoring started on a monthly basis, currently done quarterly.

4. Deficiencies are addressed by direct communication with the providers.

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Opportunities & Challenges

Challenges	Opportunities
Individual variations in adaptation of change	Standardize performance of oncologic surgery
Technical glitches with Epic updates	Data Mining
Monitoring in larger systems	Potential for automated reports
Understaffing	Expand synoptic reporting to other specialties

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Overlook Medical Center Atlantic Health System

- Category of cancer program: Academic Cancer Program
- Number of surgeons:
    - OMC-single med center 25
    - AHS-system 75
- Caseload: OMC 928 AHS Total 3684 (2020-decreased secondary to COVID)
- Synoptic operative reporting solution: Worked with our Medical center/system EPIC team to make smart lists of each of the four procedures to insert into the Operative Report template.
- Extensive education prior to roll out.
- Staged roll out-CLP at OMC, Surg Oncs OMC. CLPs entire system. Surg Oncs entire system. All surgeons entire system
- Every Operative Report includes the drop down and must be answered either Not Applicable or the appropriate report must be completed

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Opportunities & Challenges

- Early adaptation gets surgeons used to doing them prior to deadlines
- Ability to be part of the development process with Epic's national team
- Improve uniformity/quality across our system
- Allows for data mining-more specific info on each case
- Surgeon buy in-so far, no push back

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Seacoast Cancer Center at Wentworth-Douglass Hospital

- Category of cancer program: Community Hospital

- Number of surgeons: 14

- Caseload: 1500+

- Synoptic operative reporting solution: **Operations Excellence Project**
    - Objective: implement a process to report out on CoC surgical measures to meet 85% process compliance by September 22, 2020
    - Team lead by Black Belt: CTR, thoracic surgery, lung nurse navigator, quality improvement, clinical informatics, and *CLP medical director of surgical oncology
    - Created smart phrases, devised a quick tip sheet, educated surgeons, developed audit and feedback processes, and created a plan for future revisions

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Opportunities & Challenges

Opportunities:

1. Formal OE project sanctioned by hospital leadership

2. Team consisted of appropriate experts

3. Dr. David Coppola, CLP & Medical Director of Surgical Oncology, was extremely supportive and acted as liaison to the involved surgeons

4. Surgeons were informed of the standards and project expectations at surgery meetings and tumor boards. Their feedback was collected and considered.

Challenges:

1. Epic platform was new to our hospital

2. Surgeons had different preferences on how to be contacted

3. Meeting with surgeons one-on-one for training proved difficult

4. Two surgeons performing procedures are from an outside hospital

5. CoC standard revisions: updating and uploading revised SmartPhrases into the surgeon templates

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Dana-Farber Cancer Institute/Brigham and Women's Hospital

- Category of cancer program: NCIN

- Number of surgeons: 187 faculty (19 who do CoC synoptic procedures)

- Caseload: 28000 (~3500 CoC synoptic operative note-relevant)

- Synoptic operative reporting solution: Created electronic medical record template that surgeons manually insert into notes

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Opportunities & Challenges

- Division-specific prospective databases that collect disease site-specific information
  - General clinical data from OR cases (ex. intraoperative pathology)
  - Quality information (ex. Enhanced Recovery after Surgery adherence)
  - Clinical trials data (ex. Success of targeting clipped node)
- Addition of data fields from prospective databases into CoC templates
- Data transfers from electronic medical record into database (Redcap) properly formatted
- Challenges:
  - Consistent use, especially for surgeons who dictate operative notes
  - Surgeon "edits" of templates and/or data from standard format
  - Running reports and aligning data so that it properly inserts into database
- Ultimately 85% compliance in breast, our first disease site to go live
- Audits demonstrate success in importing data to prospective database

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Special thanks

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Michael Archer, DO FACS

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Denise Vose, R.T.(R)(T)

CSSP Leadership & Staff:

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ACS Cancer Programs Staff:

Asa Carter: Senior Manager, Education & Training

Chantel Ellis: Administrator, Education & Training

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