Reducing Repeat Operations for Women with Breast Cancer



Gundersen Health System July 30, 2018

Agenda

- Overview of the Issue
 - Why are we focusing on re-excision?
 - Current evidence-based practices compiled in the ASBrS CALLER Toolbox
 - Draft reports for feedback
- Individualized action plans
- Discuss next steps



For invasive breast cancer, my current practice is to re-excise for margins of:

- A. < 1 cm
- B. < 0.5 cm or 5 mm
- C. < 0.2 cm or 2 mm
- D. < 0.1 cm or 1 mm
- E. No tumor on ink



For DCIS, my current practice is to reexcise for margins of:

- A. < 1 cm
- B. < 0.5 cm or 5 mm
- C. < 0.2 cm or 2 mm
- D. < 0.1 cm or 1 mm
- E. No tumor on ink





WHY FOCUS ON RE-EXCISION?

Reducing Repeat Operations for Women with Breast

Margin Status	Stage I or II Invasive Breast Cancer (+/- DCIS)	DCIS Alone (no invasion)		
Positive Margin (tumor on ink)	Re-excise	Re-excise		
Close Margin (<2mm)	No further surgery	Re-excise		
Negative Margin (2mm or greater)	No further surgery	No further surgery		

Stage I and II Invasive Breast Cancer (+/- DCIS). A positive margin, defined as ink on invasive cancer or ductal carcinoma in situ (DCIS), is associated with two-fold increase in IBTR. This increased risk is not nullified by: delivery of a boost dose of radiation, delivery of systemic therapy (endocrine therapy, chemotherapy, or biologic therapy), or favorable biology. Wider margin widths do not significantly lower this risk. The routine practice to obtain wider negative margin widths than no ink on tumor is not indicated.

DCIS (No invasive cancer). Margins of at least 2 mm are associated with a reduced risk of IBTR relative to narrower negative margin widths in patients receiving WBRT. The routine practice of obtaining negative margin widths wider than 2 mm is not supported by the evidence.



ASBS Mastery of Surgery

Description (n = 252 surgeons, >10 BCS procedures)	Overall Re-excision Rate after Initial BCS
Pre-guideline	17.7%
(1/1/2013 – 1/1/2014)	(2457 / 13870)
Post-guideline	13.7%
(6/1/2014 – 6/1/2015)	(1836 / 13370)



Wisconsin Annual Rates

Wisconsin Data (from WHA, 6 month intervals)	Patient-level re-excision rates
Q2: 2013	19.4%
Q1: 2014	18.5%
Q2: 2014	18.7%
Q1: 2015	18.3%



Wisconsin Variation





CALLER TOOLBOX FROM ASBS

WHAT IS THE CURRENT EVIDENCE?





- 1. Gundersen Medical Foundation, La Crosse, WI
- 2. David Geffen School of Medicine,
- University of California Los Angeles, Burbank, CA
- 3. Morsani College of Medicine, University of South Florida, Tampa, FL
- 4. Dallas Surgical Group, Dallas, TX
- 5. City of Hope Medical Group, Rancho Cucamonga, CA
- 6. Mayo Clinic, Rochester, MN
- 7. Baptist Cancer Center, Baptist Memorial Health Care System, Memphis, TN

- 8. New York Presbyterian Hospital, New York, NY
- 9. Columbia University, New York, NY
- 10. Mayo Clinic, Owatonna, MN
- 11. School of Public Health and Medicine,
- University of Wisconsin Madison, Madison, WI
- 12. Bellingham Breast Center, Bellingham, WA
- 13. Memorial Sloan Kettering Cancer Center, New York, NY
- 14. Weill Cornell Medical College, New York, NY

- Mayo Clinic, Scottsdale, AZ
 Hoag Memorial Hospital, Newport, CA
 Keck School of Medicine, University of Southern California, Los Angeles, CA
 Albert Einstein Healthcare Newark, Philadelphia, PA
- 19. Akari Healthcare, Boston, MA
- 20. 21st Century Oncology, St. Joseph Mercy Oakland, Pontiac, MI
- 21. MD Anderson Cancer Center, University of Texas, Houston, TX

Toolbox of Best Practices

Ann Surg Oncol DOI 10.1245/s10434-015-4759-x Annals of SURGICAL ONCOLOGY OFFICIAL IOURNAL OF THE SOCIETY OF SURGICAL ONCOLOGY

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ORIGINAL ARTICLE - BREAST ONCOLOGY

Toolbox to Reduce Lumpectomy Reoperations and Improve Cosmetic Outcome in Breast Cancer Patients: The American Society of Breast Surgeons Consensus Conference

Jeffrey Landercasper, MD, FACS¹, Deanna Attai, MD², Dunya Atisha, MD³, Peter Beitsch, MD, FACS⁴, Linda Bosserman, MD, FACP⁵, Judy Boughey, MD, FACS⁶, Jodi Carter, MD, PhD⁶, Stephen Edge, MD⁷, Sheldon Feldman, MD, FACS^{8,9}, Joshua Froman, MD¹⁰, Caprice Greenberg, MD, MPH¹¹, Cary Kaufman, MD, FACS¹², Monica Morrow, MD, FACS^{13,14}, Barbara Pockaj, MD, FACS¹⁵, Melvin Silverstein, MD, FACS^{16,17}, Lawrence Solin, MD, FACR, FASTRO¹⁸, Alicia Staley¹⁹, Frank Vicini, MD²⁰, Lee Wilke, MD, FACS¹¹, Wei Yang, MBBS, FRCR²¹, and Hiram Cody III, MD, FACS^{13,14}

¹Gundersen Health System Norma J. Vinger Center for Breast Care, La Crosse, WI; ²David Geffen School of Medicine, University of California Los Angeles, Burbank, CA; ³Morsani College of Medicine, University of South Florida, Tampa, FL; ⁴Dallas Surgical Group, Dallas, TX; ⁵City of Hope Medical Group, Rancho Cucamonga, CA; ⁶Mayo Clinic, Rochester, MN; ⁷Baptist Cancer Center, Baptist Memorial Health Care System, Memphis, TN; ⁸New York Presbyterian Hospital, New York, NY; ⁹Columbia University, New York, NY; ¹⁰Mayo Clinic, Owatonna, MN; ¹¹School of Public Health and Medicine, University of Wisconsin Madison, Madison, WI; ¹²Bellingham Breast Center, Bellingham, WA; ¹³Memorial Sloan Kettering Cancer Center, New York, NY; ¹⁴Weill Cornell Medical College, New York, NY; ¹⁵Mayo Clinic, Scottsdale, AZ; ¹⁶Hoag Memorial Hospital, Newport, CA; ¹⁷Keck School of Medicine, University of Southern California, Los Angeles, CA; ¹⁸Albert Einstein Healthcare Network, Philadelphia, PA; ¹⁹Akari Healthcare, Boston, MA; ²⁰21st Century Oncology, St. Joseph Mercy Oakland, Pontiac, MI; ²¹MD, Anderson Cancer Center, University of Texas, Houston, TX



The ASBrS tools have different levels of evidence and consensus

All were endorsed for consideration by the American Society of Breast Surgeons in 2015



Breast Surgeons



Reducing Lumpectomy Re-operations by Consensus

3177

Tool	% CALLER participants recommending	Level of evidence/consensus	Strength of recommendation	References
SSO-ASTRO ^a guideline	94 %	High 2A nonuniform	Strong-moderate	7,8,14
Minimally invasive breast biopsy	94 %	High 1 nonuniform	Strong	12,15,49,50
Complete diagnostic mammography and US as needed	94 %	Lower 2B nonuniform	Strong-moderate	11,16,51–54
Oncoplastic lumpectomy	100 %	Lower 2A uniform	Strong-moderate	17,43-48,55,56
Lesion localization	94 %	Lower 2A nonuniform	Strong	9,18-20,49,50,53,54,57-86
Specimen orientation	95 %	Lower 2A nonuniform	Strong	49,50,87,88
Cavity shaves	75 %	Lower 2A nonuniform	Strong-moderate	25,89–97
Specimen imaging and surgeon review	100 %	Lower 2A uniform	Strong	50,98–106
Intraoperative pathology	89 %	Lower 2A-2B nonuniform	Strong-moderate	13,21,27,107-124
Preoperative multidisciplinary planning	100 %	Lower 2A uniform	Strong-moderate	49,50,125,126
Patient-reported outcome measurement	57 %	Lower 2B nonuniform	Moderate-weak	127–135

TABLE 1 CALLER Toolbox to reduce reoperation and improve cosmetic outcomes

^a SSO-ASTRO guideline only applicable for invasive cancer

CALLER Toolbox to Reduce Reoperation and Improve Cosmetic Outcomes

Ι	Tool	% CALLER participants recommending	Level of evidence / consensus	Strength of recommendation
GEON	Oncoplastic lumpectomy	100%	Lower 2A uniform	Strong-moderate
	Specimen orientation	95%	Lower 2A	Strong
T	Cavity shaves	75%	Lower 2A	Strong-moderate
	SSO- ASTRO® guideline	94%	High 2A	Strong-moderate
	Minimally invasive breast biopsy	94%	High 1 nonuniform	Strong
	Lesion localization	94%	Lower 2A	Strong
	Specimen imaging and surgeon review	100%	Lower 2A uniform	Strong
	Intraoperative pathology	89%	Lower 2A- 2B DODUDIFORD	Strong-moderate
•	Preoperative multidisciplinary planning	100%	Lower 2A uniform	Strong-moderate
SYSTE	Complete diagnostic mammography;	94%	Lower 2B DODUDITORD	Strong-moderate



Each was endorsed based on review of literature, expert opinion, and consensus

- Consensus means majority of panelists
- Thus, not every panelist agreed with every tool
- References to support tools are in the publication
- The following updates to the CALLER toolbox are based on a literature review subsequent to the Consensus Conference



SSO ASTRO Margin Guideline



In patients with invasive cancer, there is no benefit to re-excise to wider margins than those that are ink free

Ann Surg Oncol (2014) 21:704–716 DOI 10.1245/s10434-014-3481-4 Annals of SURGICAL ONCOLOGY OFFICIAL JOURNAL OF THE SOCIETY OF SURGICAL ONCOLOG

ORIGINAL ARTICLE – GUIDELINE AND META-ANALYSIS

Society of Surgical Oncology–American Society for Radiation Oncology Consensus Guideline on Margins for Breast-Conserving Surgery With Whole-Breast Irradiation in Stages I and II Invasive Breast Cancer

Meena S. Moran, MD¹, Stuart J. Schnitt, MD², Armando E. Giuliano, MD³, Jay R. Harris, MD⁴, Seema A. Khan, MD⁵, Janet Horton, MD⁶, Suzanne Klimberg, MD⁷, Mariana Chavez-MacGregor, MD⁸, Gary Freedman, MD⁹, Nehmat Houssami, MD, PhD¹⁰, Peggy L. Johnson¹¹, and Monica Morrow, MD¹²



Have rates improved after publication of the SSO ASTRO Margin Guideline?



Update---compliance with the SSO ASTRO Margin Guideline for invasive cancer

Observational results of reoperation rates (ROR) after initial lumpectomy for invasive breast cancer before and after

÷											
				Total Sample Size			Ab	osolute	Relative		
	First Author	Database type	Database Source	Pre	Post	Before SSO G	After SSO G	cha reop ra	ange in peration ate (%)	change in reoperation rate	p value.
	Schulman AM	National	ASBrS Mastery SM	13,297	12,805	20.2	16.5		3.8	23.03	0.004
	Manana M	National	Surveillance. Epidemiology.	27	720	21 (Initial L + re excision)	14		7	50	< 0.001
	Morrow M	Ivational	and End Results registries		129	13 (Initial L + M)	4		9	225	< 0.001
	<u>Bhutiani</u> N	Institutional	University of Louisville	126	111	37	9		28	311.11	< 0.001
	Chung A	Institutional		597	248	19	13		6	46.15	0.03
			Cedars-Sinai Medical Center	115	32	30	22		8	36.36	0.28
	Rosenberger, L	Institutional	Memorial Sloan Kettering Cancer Center	504	701	21.4	15.1		6.3	41.72	0.006
	Patten CR	Institutional	Levine Cancer Institute Tumor Registry	402	552	20.4	16.3		4.1	25.15	0.104

1. Schulman AM, Mirrielees JA, Leverson G, Landercasper J, Greenberg C, Wilke LG.Reexcision Surgery for Breast Cancer: An Analysis of the American Society of Breast Surgeons (ASBrS) MasterySM Database Following the SSO-ASTRO "No Ink on Tumor" Guidelines. Ann Surg Oncol. 2017 Jan;24(1):52-58. doi: 10.1245/s10434-016-5516-5.

2. Morrow M, Abrahamse P, Hofer TP, Ward KC, Hamilton AS, Kurian AW, Katz SJ, Jagsi R. Trends in Reoperation After Initial Lumpectomy for Breast Cancer: Addressing Overtreatment in Surgical Management. JAMA Oncol. 2017 Oct 1;3(10):1352-1357.

3. 3. Bhutiani N, Mercer MK, Bachmann KC, Heidrich SR, Martin RC 2nd, Scoggins CR, McMasters KM, Ajkay N. Evaluating the Effect of Margin Consensus Guideline Publication on Operative Patterns and Financial Impact of Breast Cancer Surgery. J Am Coll Surg. 2018 Feb 8. pii: S1072-7515(18)30104-2. doi: 10.1016/j.jamcollsurg.2018.01.050. [Epub ahead of print]

4. Chung A, Gangi A, Amersi F, Bose S, Zhang X, Giuliano A. Impact of Consensus Guidelines by the Society of Surgical Oncology and the American Society for Radiation Oncology on Margins for Breast-Conserving Surgery in Stages 1 and 2 Invasive Breast Cancer. Ann Surg Oncol. 2015 Dec;22 Suppl 3:S422-7. doi: 10.1245/s10434-015-4829-0. Epub 2015 Aug 27. PMID: 26310280

5. Rosenberger LH, Mamtani A, Fuzesi S, et al. Early Adoption of the SSO-ASTRO consensus guidelines on margins for breast-conserving surgery with whole-breast irradiation in stage I and II invasive breast cancer: initial experience from Memorial Sloan Kettering Cancer Center. Ann Surg Oncol. 2016;23(10):3239-3246

6. Patten CR, Walsh K, Sarantou T, Hadzikadic-Gusic L, Forster MR, Robinson M, White RL Jr. Changes in margin re-excision rates: Experience incorporating the "no ink on tumor" guideline into practice. J Surg Oncol. 2017 Dec;116(8):1040-1045. doi: 10.1002/jso.24770. Epub 2017 Jul 27;

SSO ASTRO Guideline ought to be a more powerful tool than what we see so far to lower reoperations



- Based on ASBrS "reasons for re-excision"---40% decrease
- But we have not observed this in publications --yet



Ann Surg Oncol (2014) 21:704–716 DOI 10.1245/s10434-014-3481-4 Annals of SURGICAL ONCOLOGY

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Ann Suig Oncol (2014) 21:3185-3191 DOI 10.1245A10434-014-3905-1 SURGICAL ONCOLOGY

ORIGINAL ARTICLE - BREAST ONCOLOGY

Reasons for Re-Excision After Lumpectomy for Breast Cancer: Insight from the American Society of Breast Surgeons MasterySM Database

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¹Department of Surgery, Gundersen Health System, La Crosse, WI; ²Norma J. Vinger Center for Breast Care, Gundersen Health System, La Crosse, WI; ³Breast Center of Southern Arizona, Tucson, AZ; ³Department of Surgery, Mayo Clinic, Rochester, MN; ³Department of Medical Research, Gundersen Health System, La Crosse, WI



Why?



- Delay in uptake
- The G is "complicated"
- Example of how we can help each other with surgeon-surgeon (SCW) interactions

Did you know that , margin widths wider than "no ink on tumor" are not indicated for patients with

-unfavorable biology (triple negative, HER 2 +, high grade)

-with combined invasive cancer and DCIS (even though the new pure DCIS G is to re-excise for a margin < 2mm)

-young age

-invasive lobular histology

- -extensive intra-ductal carcinoma (EIC) status
- -lobular carcinoma in situ (LCIS) at inked edge
- -patient not receiving recommended adjuvant systemic treatment



Cavity shave update



Cavity shave margins reduce the positive margin and re excision rate.

Selective or routine use should be considered. Level 1 trial evidence x 2

Refs

Chagpar AB, Killelea BK, Tsangaris TN, Butler M, Stavris K, Li F, et al. A Randomized, Controlled Trial of Cavity Shave Margins in Breast Cancer. N Engl J Med. 2015;373(6):503-10.

Corsi F, Sorrentino L, Bonzini M, Bossi D, Truffi M, Amadori R, et al. Cavity Shaving Reduces Involved Margins and Reinterventions Without Increasing Costs in Breast-Conserving Surgery: A Propensity Score-Matched Study. Ann Surg Oncol. 2017;24(6):1516-24.

Chagpar AB, Horowitz NR, Killelea BK, Tsangaris T, Longley P, Grizzle S, et al. Economic Impact of Routine Cavity Margins Versus Standard Partial Mastectomy in Breast Cancer Patients: Results of a Randomized Controlled Trial. Ann Surg. 2017;265(1):39-44.

Jones V, Linebarger J, et al. Excising Additional Margins at Initial Breast-Conserving Surgery (BCS) Reduces the Need for Re-excision in a Predominantly African American Population: A Report of a Randomized Prospective Study in a Public Hospital. Ann Surg Oncol. 2016 Feb;23(2):456-64. doi: 10.1245/s10434-015-4789-4. Epub 2015 Aug 8.



The NEW ENGLAND JOURNAL of MEDICINE					
ESTABLISHED IN 1812	AUGUST 6, 2015	VOL. 373 NO. 6			
A Randomized, Cor	ntrolled Trial of Cav in Breast Cancer	ity Shave Margins			
Anees B. Chagpar, M.D., M.P.H Meghan Butler, Karen Stavris, R.N., M Malini Harigopal, M.D., Donald R. La	I., Brigid K. Killelea, M.D., M.P.H., Th .S.N., Fangyong Li, M.P.H., Xiaopan annin, M.D., Lajos Pusztai, M.D., D.f	neodore N. Tsangaris, M.D., Yao, Ph.D., Veerle Bossuyt, M.D., Phil., and Nina R. Horowitz, M.D.			
nn Surg Oncol (2016) 23:456–464 DOI 10.1245/s10434-015-4789-4	Annals of SURGICAL ONCOLOC OFFICIAL JOURNAL OF THE SOCIETY OF SURGICAL ON	GY SCOLOGY CrossMark			

African American Population: A Report of a Randomized Prospective Study in a Public Hospital

Veronica Jones, MD^{1,2}, Jared Linebarger, MD³, Sebastian Perez, MPH², Sheryl Gabram, MD, MBA^{1,2}, Joel Okoli, MD⁴, Harvey Bumpers, MD⁵, Brian Burns⁶, Marina Mosunjac, MD⁶, and Monica Rizzo, MD¹

¹Grady Memorial Hospital, Winship Cancer Institute, Emory University, Atlanta, GA; ²Winship Cancer Institute, Emory University, Atlanta, GA; ³Department of Surgery, Gundersen Health System, La Crosse, WI; ⁴Morehouse School of Medicine, Grady Memorial Hospital, Atlanta, GA; ⁵Department of Surgery, Michigan State University, Lansing, MI; ⁶Department of Pathology, Grady Memorial Hospital, Emory University, Atlanta, GA



Onco-plastic lumpectomy and larger volume excision updates

- In mostly unadjusted non-randomized reviews of those patients undergoing OPL compared to those that did not, those with OPL had lower rates of
- ODI procedures can also improve cosmetic outcomes

reoperation

OPL procedures can also improve cosmetic outcomes



Intra-operative frozen section or imprint cytology update



- Reoperation rates after initial lumpectomy for cancer are significantly lower in those facilities utilizing routine intra-operative frozen section or imprint cytology for margin assessment compared to national average rates of reoperation.
- The reproducibility of the accuracy of frozen section techniques outside of centers that have already verified excellent results is unknown.
- For institutions wanting to adopt these techniques, we recommend they audit their results.



Lesion localization update



- For non-palpable (or challenging to palpate) breast lesions, the use of radioactive seeds, intraoperative US, wire localization, electro-magnetic or other methods to target the lesion for excision is recommended
- There is no clear "best" method for the outcome of positive margin rates
- The non-wire localizations are becoming popular because they facilitate physician schedules
- Modality should be driven by surgeon comfort and audit performed if modality is changed.

Complete diagnostic Mammography and US updates



MRI on recent analysis is similar to prior MRI publications; MRI is not associated with decreased reoperations.

Houssami N, Turner RM, Morrow M. Meta-analysis of pre-operative magnetic resonance imaging (MRI) and surgical treatment for breast cancer. Breast Cancer Res Treat. 2017 Sep;165(2):273-283.



Minimally invasive biopsy for diagnosis No updates

The Tool----Lower reoperation rates occur in patients with a breast cancer diagnosis before the patient goes to the OR.

In your breast center/community, the diagnosis of breast cancer should almost always be made by minimally invasive techniques. Below is a benchmark.

A decade ago, nearly all [350 (97%) of 360] consecutive cancers were diagnosed by needle biopsy

Core Needle Biopsy Rate for New Cancer Diagnosis in an Interdisciplinary Breast Center

Evaluation of Quality of Care 2007–2008

Jared H. Linebarger, MD,* Jeffrey Landercasper, MD, FACS,†‡ Richard L. Ellis, MD, FSBI,†§ Jacob D. Gundrum, MS,¶ Kristen A. Marcou, AA,† Brooke M. De Maiffe, BA,¶ Jane M. Hudak, RHIT,† and Jeremiah J. Andersen, MD||



Specimen imaging and review

Used to do more than confirm removal of the target. Use imaging to examine margin status This allows additional resection in the OR. Minimum 2 view- orthogonal.





Ann Surg Oncol. 2018 Jun 26. doi: 10.1245/s10434-018-6607-2. [Epub ahead of print]

Multidisciplinary Intraoperative Assessment of Breast Specimens Reduces Number of Positive Margins.

Tevis SE¹, Neuman HB², Mittendorf EA^{1,3}, Kuerer HM¹, Bedrosian I¹, DeSnyder SM¹, Thompson AM¹, Black DM¹, Scoggins ME¹, Sahin AA¹, Hunt KK¹, Caudle AS⁴.

At MD Anderson, "potential" decrease in reoperations from 21% to 7% with specimen imaging of serial sections compared to whole specimen imaging



Multidisciplinary Discussions



It is self-evident that there are many advantages to multidisciplinary care in all patients with cancer.

- Radiology, Pathology, Surgery, and Radiation and Medical Oncology

However, in an updated review of the literature, no studies with a high level of evidence were identified to confirm the importance of pre-operative multidisciplinary planning to improve the specific outcome of reoperation rates after lumpectomy



What is the **benchmark** (target goal) endorsed by American [ASBrS] and European [EUSOMA] surgeons?



Jeffrey Landercasper, MD, FACS⁷, Deanna Attai, MD⁷, Dunya Attsha, MD⁷, Peter Beitsch, MD, FACS⁷, Linda Bosserman, MD, FACP⁵, Judy Boughey, MD, FACS⁶, Jodi Carter, MD, PhD⁶, Stephen Edge, MD⁷, Sheldon Feldman, MD, FACS^{8,9}, Joshua Froman, MD¹⁰, Caprice Greenberg, MD, MPH¹¹, Cary Kaufman, MD, FACS¹², Monica Morrow, MD, FACS^{13,14}, Barbara Pockaj, MD, FACS¹⁵, Melvin Silverstein, MD, FACS^{16,17}, Lawrence Solin, MD, FACR, FASTRO¹⁸, Alicia Staley¹⁹, Frank Vicini, MD²⁰, Lee Wilke, MD, FACS¹¹, Wei Yang, MBBS, FRCR²¹, and Hiram Cody III, MD, FACS^{13,14}

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Position Paper

Quality indicators in breast cancer care

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^a Eusoma, Florence, Italy

10% is the target goal



N.B.

The Target goal is not zero.

Reoperations in patients with positive lumpectomy margins is "good" care

Reoperations in appropriate patients reflects high quality care, because to do so, decreases the risk of subsequent in-breast-tumor-recurrence





DRAFT REPORTS AND ACTION PLANS



SCW Confidential Performance Report for Hospital X Quality Initiative: Reducing Repeat Operations for Women with Breast Cancer Reporting Period: January-December 2017



Reducing Repeat Operations for Women with Breast Cancer

Table 1. Unadjusted and risk- and reliability adjusted re-excision and mastectomy rates

	Hospital X	Participating	All WI Hospitals
		Hospitals (n=)	(n=)
60-Day Re-Excision Rate			
Unadjusted			
Risk- and Reliability-Adjusted			
Mastectomy as First Operation			
Unadjusted			
Risk- and Reliability Adjusted			

Table 2. Case volume, sociodemographics and clinical characteristics

	Hospital X	Participating Hospitals (n=)	All WI hospitals (n=)
Number of Index Lumpectomy			
Procedures			
Number of Mastectomy Procedures			
(as First Operation)			
Number of Repeat Procedures			
Mean age (SD)			
Payer			
Private insurance			
Medicare			
Medical assistance/Badgercare			
Self-pay			
Other			





Black line: Statewide median hospital-level re-excision rate. Black dashed line: Target re-excision rate (European Society of Breast Surgeons, American Society of Breast Surgeons). Each bar represents a hospital in Wisconsin. Error bars represent confidence intervals around each hospital estimate. Your hospital's performance is represented by the solid blue bar.

Figure 2. Risk- and reliability-adjusted hospital mastectomy rates



Black line: Statewide median hospital-level re-excision rate. Each bar represents a hospital in Wisconsin. Error bars represent confidence intervals around each hospital estimate. Your hospital's performance is represented by the solid blue bar.

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Reducing Repeat Operations for Women with Breast Cancer Protocol Prioritization

Directions: Each component of the guideline target is listed in the first column. Use the test questions to help you prioritize your areas of interest. The goal is to identify 1-3 that will be the focus of your initiative efforts. Once you have completed the prioritization, use the worksheet below to develop an action plan.

Initiative Guideline	Strength of Evidence of Effectiveness (high, med, low)	Determine Priority					
Oncoplastic Lumpectomy	High	Worth doing? Yes No Measureable? Yes No Improve outcomes? Yes No Fits with facility/practice culture? Yes No					
Specimen Orientation	High	Worth doing? Yes No Measureable? Yes No Improve outcomes? Yes No Fits with facility/practice culture? Yes No					
Cavity Shaves	High	Worth doing? Yes No Measureable? Yes No Improve outcomes? Yes No Fits with facility/practice culture? Yes No					
SSO-ASTRO Guideline	High	Worth doing? Yes No Measureable? Yes No Improve outcomes? Yes No Fits with facility/practice culture? Yes No					
Minimally Invasive Breast Biopsy	High	Worth doing? Yes No Measureable? Yes No Improve outcomes? Yes No Fits with facility/practice culture? Yes No					
Lesion Localization	High	Worth doing? Yes No Measureable? Yes No Improve outcomes? Yes No Fits with facility/practice culture? Yes No					
Specimen Imaging and Surgeon Review	High	Worth doing? Yes No Measureable? Yes No Improve outcomes? Yes No Fits with facility/practice culture? Yes No					
Intraoperative Pathology	High	Worth doing? Yes No Measureable? Yes No Improve outcomes? Yes No Fits with facility/practice culture? Yes No					
Preoperative Multidisciplinary Planning	High	Worth doing? Yes No Measureable? Yes No Improve outcomes? Yes No Fits with facility/practice culture? Yes No					
Complete Diagnostic Mammography, ultrasound as Needed	High	Worth doing? Yes No Measureable? Yes No Improve outcomes? Yes No Fits with facility/practice culture? Yes No					

Reducing Repeat Breast Operations Action Planning Worksheet

Intervention 1: _____

1. Identify characteristics about your practice that will either help or hinder your ability to implement this intervention (barriers/facilitators).

2. Who do you need to engage and what are their roles?

3. Initial tasks to get started (first steps/strategies needed to reach aim/desired outcome).

4. How will you determine success? Your goal(s) for success should answer the question, "What do you want to accomplish?" Well written goals should be S.M.A.R.T.: S – Specific ; M – Measurable ; A – Achievable ; R – Realistic ; T – Time-based; Write your goal(s) in the space below

Goal 1:

Goal 2 (if applicable):

Goal 3 (if applicable):



NEXT STEPS



Next Steps

- Feedback on draft reports will lead to updates
- Performance reports distributed
- Work within your small groups of 5-6 over the next few months
- Volunteers to share successes and challenges in November at the next meeting

