Measure #4 (ASPS 29): Avoidance of Opioid Prescriptions for Closures and Reconstruction After Skin Cancer Resection

This measure may be used as an Accountability measure.

Measure Description

Percentage of procedures in patients, aged 18 and older with a diagnosis of skin cancer, who had intermediate layer and/or complex linear closures OR reconstruction after skin cancer resection where opioid/narcotic therapy* was prescribed as first line therapy (as defined by a prescription in anticipation of or at time of surgery) for post-operative pain management by the reconstructing surgeon. (Inverse measure)

This measure is stratified by intermediate layer or complex linear closures and **reconstructive procedures.**

Measure Components	
Numerator Statement	Patients who were prescribed opioid/narcotic therapy* as first line therapy (as defined by a prescription in anticipation of or at time of surgery) for post-operative pain management by the reconstructing surgeon. (Inverse measure) *List of narcotic/opioid medications that should not be prescribed: morphine, oxycodone, fentanyl, oxymorphone, hydromorphone, buprenorphine, meperidine, codeine, butorphanol, levophanol, sufentanil, pentazocine, tapentadol, hydrocodone
Denominator Statement	All procedures in patients aged 18 and older with a diagnosis of skin cancer where intermediate layer and/or complex linear closures OR reconstruction after skin cancer resection were performed All procedures in patients with a diagnosis of skin cancer aged 18 and older who underwent: Strata 1: Intermediate layer or complex linear closures after skin cancer resection Strata 2: Reconstruction after skin cancer resection Strata 3: Intermediate layer and complex linear closures AND reconstruction after skin cancer resection in the office-based setting (Weighted average of Strata 1 AND 2)
Denominator Exclusions	1. Location exclusion due to high tension closure and anticipated exceptional postsurgical pain (lower extremity, scalp, ear, genitals, perineum, lip, and nail unit) 2. Surgical procedures associated with anticipated exceptional post-surgical pain a. flaps greater than 30 square cm*

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	b. split thickness skin grafts greater than 10 square cm* c. paramedian forehead flap* d. composite graft* *These exclusions apply only to strata 2 (Reconstruction)
Denominator Exceptions	1. Medical reason exception for patients who cannot take non-opioid pain medications (i.e. patients with chronic kidney disease, COPD, allergy to non-steroidal anti-inflammatory medications and acetaminophen or documented contraindication to non-steroidal anti-inflammatory medications and acetaminophen, cirrhosis/liver disease) 2. Number of surgical sites – greater than 3 skin cancer sites treated or reconstructed in one day of service)
Supporting Guideline	**5a. The Work Group recommends that clinicians should not routinely prescribe narcotic medication as first line treatment for pain in adult patients undergoing reconstruction after skin cancer resection.** **Evidence Quality: Moderate** **Recommendation Strength: Moderate** **5b. The Work Group recommends that clinicians should prescribe acetaminophen and nonsteroidal anti-inflammatory drugs (NSAIDs) as first line therapy in adult patients undergoing reconstruction for skin cancer resection.** **Evidence Quality: Moderate** **Recommendation Strength: Moderate** Chen et al, ASPS, Reconstruction After Skin Cancer Resection Guideline 2019, in press
Measure Importance	
Rationale/ Opportunity for Improvement	There is increasing evidence that prescription narcotics, which surgical patients are 4 times as likely to receive upon discharge than non-surgical patients, are associated with increased risk of opioid diversion, addiction, unintentional injury, and death (Brat GA 2018). Patients who fill narcotic prescriptions after minor surgical procedures are more likely to exhibit persistent opioid use (Harbaugh CM 2018), and the duration of the prescribed use is a predictor of future misuse (Harris K 2014). Pain following Mohs micrographic surgery is typically short-lived, peaking at a mean of approximately 2-3/10 on the day of surgery (as soon as 4 hours postoperatively) before returning rapidly toward baseline (Firoz et al 2010; Sniezek et al 2018; Merritt et al 2012; Limthongkul et al 2013). In the realm of reconstruction after skin cancer removal, a randomized clinical trial comparing oral postoperative pain management regimens has not shown narcotics to be more effective (Sniezek et al 2018). Specifically, patients undergoing reconstruction of head and neck wounds were assigned to receive every 4 hours after surgery (up to 4 doses) one of the following: 1000 mg of acetaminophen, 1000 mg of acetaminophen plus 400 mg of ibuprofen, or 325

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	mg of acetaminophen plus 30 mg of codeine. Pain was assessed by patient self-report using a visual analog scale immediately after surgery, and at 2, 4, 8, and 12 hours postoperatively. Subgroups were compared based on the area of the reconstructed defect. At 2 and at 4 hours the acetaminophen plus codeine group reported more pain than the acetaminophen plus ibuprofen group. At other time points, no difference was seen in mean change in pain scores across the groups. At no time points was the regimen including the narcotic agent found to control pain better than either of the other two non-narcotic regimens. Overall patient satisfaction, measured at the end of the study, did not differ between the codeine group and either of the other two groups (Sniezek et al 2018). Retrospective and prospective case series (Parsa FD 2017; Kelley BP 2016) that compared narcotic and non-narcotic post-operative pain strategies found no difference in surgical outcomes. This measure is specifically focused on not prescribing opioids and narcotics as first line treatment. Although it does not address other forms of pain management, the guideline on which the measure is based does. That recommendation is cited above. There is also flexibility to add a narcotic medication for breakthrough pain should the need arise. Gap in care: All Mohs micrographic patients in a study by Limthongkul, Samie et al 2013) were given an opioid prescription to fill as needed, and more patients (16% vs 7.1%) used opioids for pain relief than in similar studies where the prescription was not given ahead of time. Another study comparing full-thickness skin grafts with second-intention wound healing for defects of the helix found the mean pain scores to be similar for both (2.8 and 2.5 of 10, respectively) (Hochwalt, Christensen et al 2015). Thirty-five percent of the patients in Harris et al 2104 received a postoperative opioid prescription, with a total of 851 opioid pills prescribed for 82 patients. In a survey of ASDS members regarding opioids prescribing, 36% reported prescribing opioids in > 10% of their cases, with 7% prescribing in more than 75% of cases. 59% reported prescribing >10 pills and 31% reported prescribing >15 pills after surgery (Harris et al 2014).
Harmonization with Existing Measures	There are currently no opioid measures for post-op acute pain in skin cancer patients, or even in general surgery, in MIPS or on the 2019 QCDR list.
Measure Designation	
Measure Purpose	Accountability Quality Improvement
Type of Measure	Process
Care Setting	Ambulatory care, ASC, Inpatient
Data Source	Medical record (paper or EHR), administrative data

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Guidance	Reconstruction After Skin Cancer Resection: Reconstructive options may include tissue rearrangement, grafts, or flaps. See the specifications at the end of the document for exact codes included in each measure. As previously stated, this measure applies to first line prescriptions only. It is not expected that performance will be 100% on this measure.

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<table>
<tr>
<td>Denominator (Eligible Population)</td>
<td>
All procedures in patients aged 18 and older with a diagnosis of skin cancer where intermediate layer and/or complex linear closures OR reconstruction after skin cancer resection were performed

Strata 1: Intermediate layer or complex linear closures after skin cancer resection

Strata 2: Reconstruction after skin cancer resection

Strata 3: Intermediate layer and complex linear closures AND reconstruction after skin cancer resection in the office-based setting (Weighted average of Strata 1 AND 2)

Age > 18 years

AND

Strata 1:
CPT for Encounter Intermediate layer and complex linear closures
12031, 12032, 12034, 12035, 12036, 12037, 12041, 12042, 12044, 12045, 12046, 12047, 12051, 12052, 12053, 12054, 12055, 12056, 12057, 13100, 13101, 13120, 13121, 13131, 13132, 13150, 151, 13152

OR

Strata 2:
CPT® for Encounter Reconstruction
14000, 14001, 14020, 14021, 14040, 14041, 14060, 14061; 15100,15120; 15200, 15220, 15240, 15260; 15570, 15572, 15574, 15576; 15730, 15740; 67971, 67973, 67974, 67975

and

ICD-10 Codes for most common skin cancers:
C43-C44
D03-D04

Strata 3: FOR REPORTING
Strata 1 + Strata 2; Calculate as (numerator 1 + numerator 2)/ (denominator 1 + denominator 2), not the average of the performance rates

Code descriptions - for reference only:
<table>
<tr><th>Code Range</th><th>Descriptors</th></tr>
<tr><td>14000 - 14061, 14301</td><td>Adjacent Tissue Transfer</td></tr>
<tr><td>14350</td><td>Filleted finger or toe flap, including preparation of recipient site</td></tr>
<tr><td>15050</td><td>Pinch graft, single or multiple, to cover small ulcer, tip of digit, or other minimal open area (except on face), up to defect size 2 cm diameter</td></tr>
<tr><td>15100 - 15120</td><td>Split Thickness Grafts</td></tr>
<tr><td>15200 - 15260</td><td>Full Thickness Grafts</td></tr>
<tr><td>15570 -15576</td><td>Formation of direct or tubed pedicle</td></tr>
<tr><td>15730</td><td>Midface flap (i.e., zygomaticofacial flap) with preservation of vascular pedicle(s)</td></tr>
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	15740	Island Pedicle Flap
	15760	Composite Skin Graft
	17311, 17313	Base codes used to report Mohs micrographic surgery
	67971 - 67975	Reconstruction of Eyelid
Denominator Exclusions	1. Location exclusion due to high tension closure and anticipated exceptional postsurgical pain (lower extremity, scalp, ear, genitals, perineum, lip, and nail unit) 2. Surgical procedures associated with anticipated exceptional post-surgical pain a. Flaps greater than 30 square cm* b. Split thickness skin grafts greater than 10 square cm* c. Paramedian forehead flap* d. Composite graft* *These exclusions only apply to strata 2 (Reconstruction)	
Numerator	Patients who were prescribed opioid/narcotic therapy* as first line treatment (as defined by a prescription in anticipation of or at time of surgery) for post-operative pain management by the reconstructing surgeon. (Inverse measure) *List of narcotic/opioid medications included: morphine, oxycodone, fentanyl, oxymorphone, hydromorphone, buprenorphine, meperidine, codeine, butorphanol, tramadol, levophanol, sufentanil, pentazocine, tapentadol, hydrocodone Captured by attestation in the workflow of the ASPS QCDR	
Denominator Exceptions	1. Medical reason exception for patients who cannot take non-opioid pain medications (patients with chronic kidney disease, COPD, allergy to non-steroidal anti-inflammatory medications and acetaminophen or documented contraindication to non-steroidal anti-inflammatory medications and acetaminophen, cirrhosis/liver disease) 2. Number of surgical sites – greater than 3 skin cancer sites treated or reconstructed in one day of service)	