serious threats to patient access to reconstruction of choice based on their insurance status.

Patient Care and Quality Improvement: Utilization of a Novel Risk Calculator to Predict Unanticipated Postoperative Readmission

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PURPOSE: Unanticipated postoperative readmission will be a quality-directed metric linked to CMS reimbursement. In an effort to both optimize patient care and prevent negative financial implications, we have identified patient risk factors that contribute to unanticipated postoperative readmissions for plastic surgery patients. Building on this knowledge, the aim of this current study is to create a risk index calculator to quantifiably predict the likelihood of 60-day postoperative readmissions.

METHODS: An IRB approved retrospective review was done evaluating 671 randomly-selected patients undergoing procedures with the Plastic & Reconstructive Surgery service at our institution between January 1, 2013 and December 31, 2014. 60-day postoperative readmissions were identified for 58 (8.6%) patients. Logistical regression and backward variable selection with an inclusive p-value <0.30 yielded patient age, BMI, same-site procedure, renal disease, thyroid disease, CAD, COPD, and history of malignancy as variables associated with readmission.

RESULTS: We used a linear combination rule with the associated variables associated with readmission to create a risk index calculator. The product of the risk calculator yields a Risk Index Value (RIV). The RIV corresponds to a Predicted Percentage (PP) representing the probability of a 60-day postoperative readmission.

CONCLUSION: Patient risk factors associated with unanticipated postoperative readmissions can be used to calculate the percentage likelihood of 60-day postoperative readmission. With this information, practitioners can provide appropriate resources for patients at increased risk of readmission ultimately satisfying quality-directed metrics linked with CMS reimbursement as well as optimizing the delivery of patient care.

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Shared Decision Making in Pediatric Plastic Surgery: A Multicenter Prospective Study in a Cohort of Patients with Vascular Malformations

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INTRODUCTION: Shared decision making (SDM) is a communication approach in which clinicians and patients arrive at a joint decision about the best therapeutic action, which is not only medically relevant but also suits the situation and preferences of the patient. The importance of SDM in modern health care is stressed by many physicians and politicians. SDM would increase patient participation, patient satisfaction and therapeutic adherence. Furthermore, it would reduce the use of discretionary therapeutic interventions. However, little is known about the role of SDM in pediatric plastic surgery. In this multicenter prospective study in a cohort of patients with vascular malformations, we investigated patient preferences, the current status of SDM practice and the relationship with patient satisfaction.

METHODS: Patients with peripheral vascular malformations who were facing a treatment-related decision, visiting the outpatient clinics of 2 university hospitals in the Netherlands, were prospectively followed. Parents and patients older than 18 years completed several validated SDM questionnaires about their preferences regarding decision making (Control Preferences Scale), SDM-related content of the conversation (SDM-Q-9), the patient’s perspective of involvement during the consultation (CollaboRATE) and patient satisfaction. The physicians completed a physician-specific version of the SDM-Q-9. Furthermore, all consultations were audiotaped and independently assessed for SDM-specific criteria by 2 researchers using the OPTION-5 score.
**RESULTS:** Fifty-five participants (31 patients and 24 parents) completed all questionnaires, 98.2% preferred active involvement in therapeutic decision-making. The SDM-Q-9 scores, assessed by patients and physicians, were acceptable (mean 68 out of 100). However, the independently assessed OPTION-5 scores were significantly lower (mean 31 out of 100). In the consultations, physicians rarely asked for patient preferences regarding involvement. In addition, the patient’s freedom of choice and pros and cons of treatment options were inadequately explained. The degree of patient involvement from the patient’s perspective (CollaboRATE) was significantly correlated with patient satisfaction ($\rho = 0.35$, $p<0.01$).

**CONCLUSION:** In this cohort, almost all patients and parents preferred involvement in therapeutic decision-making. If they felt involved, they were more likely to score higher on the satisfaction scale. However, SDM was not adequately performed in this cohort. An explanation for this could be that both patients and parents are relatively unfamiliar with SDM. To enhance and facilitate SDM practice, physician and patient targeted interventions (such as trainings and digital decision aids) are essential.

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**The Economic Impact of Skin Cancer**

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**BACKGROUND:** The incidence and cost of non melanoma skin cancers (NMSC) is skyrocketing. Five million cases cost $8.1 billion in 2011. The average cost of treatment per patient increased from $1000 in 2006 to $1600 per patient by 2011. We present a study of the economics and costs of skin cancer management in Medicare patients.

**METHODS:** We studied data released by the Centers for Medicare and Medicaid Services in 2014. Treatment modalities for the management of skin cancer were reviewed and costs of treatment were quantified for a sample of 880,000 providers.

**RESULTS:** Review of Medicare payment records related to the management of skin cancer yielded data from over 880,000 health care providers who received $77 billion in Medicare payments in 2012. From 1992–2009, MMS increased by 120–370% more than surgical excision, even when including pathology fees. From 1992–2009, MMS increased by 700% whereas surgical excisions increased by only 20%. In 2009, 1800 providers billed Medicare for MMS; in 2012 that number increased to 3209. On average, 1 in 4 cases of skin cancer is treated with MMS.

**CONCLUSION:** Mohs excision is more expensive than surgical excision in an office setting. Procedures requiring the operating room are much more expensive than office procedures. In an era of high deductible health plans, patients’ financial burden is much less with simple excisions of skin cancers done in a clinic setting when compared to Mohs surgery or operative procedures.

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**The Proliferation of Accredited Plastic Surgery Subspecialty Fellowship Programs**

**Jason Silvestre, BS; Jesse A. Taylor, MD; L. Scott Levin, MD; Joseph M. Serletti, MD; Benjamin Chang, MD**

**BACKGROUND:** There is an increasing trend toward subspecialty training in the U.S. healthcare workforce. This study determines the percentage of surgical chief residents seeking fellowship training. Additionally, trends in Accreditation Council for Graduate Medical Education (ACGME) accreditation of plastic surgery subspecialty fellowships are determined.

**METHODS:** Program directors of U.S. surgical residency programs were surveyed on career intentions of chief residents for 2013. The percentage of residents pursuing fellowship training were determined for integrated and independent plastic surgery residents and compared with statistics from other surgical specialties. Temporal trends in ACGME accreditation of craniofacial, hand, and microsurgery fellowship programs were assessed via chi square goodness of fit tests. The percentage of ACGME accredited programs were compared between subspecialty areas with Subspecialty Certification (hand surgery) relative to areas without Subspecialty Certification (craniofacial surgery and microsurgery).

**RESULTS:** The majority of integrated and independent plastic surgery chief residents pursued fellowship training (62.0% vs 55.6%, $p = 0.554$). Significant differences were seen compared with chief residents in other surgical specialties from a high in orthopaedics (91.0%) to a low in colon...