

A Quality Improvement Project: Assessment and Management of Anxiety in Preoperative and Postoperative Patients



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Problem Statement

- Anxiety related to impending surgery can contribute to prolonged hospital stays (Dehghan et al., 2019), increased readmission rates (Abate et al., 2020), and decreased patient satisfaction (Abate et al., 2020; Celik & Edipoglu, 2018; Jung et al., 2023; Tomaszek et al., 2019).
- Perioperative anxiety can elevate blood pressure (Jung et al., 2023), increasing the risk of pulmonary edema and cardiac mortality (Abate et al., 2020).
- The lack of a comprehensive anxiety assessment tool at the project site prevented anxiety from being identified and its management being planned and organized.
- The lack of a standardized anxiety assessment tool impacts the patient's healing and affects their overall experience (Shore et al., 2021; Rothrock, 2022).

Project Purpose

The project aims to standardize anxiety assessment and its subsequent management on the project site. Anxiety reduction would be a secondary benefit of the project (Gu et al., 2021). The project also aimed to improve the Hospital Consumer Assessment of Healthcare Providers and Systems (CAHPS®) and quality and patient satisfaction for the surgeons who are the stakeholders for piloting this project with the surgery population first as a secondary benefit.

PICOT

In preoperative and postoperative surgical patients, how does implementing an anxiety bundle, compared to the current practice, affect the assessment and treatment of anxiety by the end of 12 weeks?

SMART Objectives

- Increase documentation of anxiety in pre-op patients by 40% by the end of 12 weeks.
- Increase documentation of anxiety in PACU patients by 40% by the end of 12 weeks.
- To increase the use of non-pharmacological methods for anxiety treatment in pre-op patients by 15% by the end of 12 weeks.
- To increase the use of non-pharmacological methods for anxiety treatment in PACU patients by 15% by the end of 12 weeks.

Methodology

Methodology

Project Design:

- Quality Improvement (QI)

Setting:

- Pre-Op and PACU
- Location: Southwestern Region of the United States
- Interdisciplinary team
- 30-35 surgeries daily

Population

Primary Population:

- Inclusion criteria – pre-op and PACU nurses and patient care partners
- Exclusion criteria -non pre-op and PACU RNs, non pre-op and PACU patient care partners

Secondary Population:

- Inclusion criteria- elective surgery patients over 18, alert, able to consent
- Exclusion- nonelective surgery patients, under 18, not alert, not able to consent

Implementation Strategy:

- Plan-Development of VFAS, algorithm, recruitment flyer, IRB and CUHSR approvals
- Do- Implementation of VFAS, pre-op and PACU anxiety questionnaires, and algorithm
- Study- Data collection and data analysis
- Act- Plan for sustainability, dissemination of the results

Outcomes

Table 1

Anxiety Assessment Documentation in Pre-Op

Week	1	2	3	4	5	6	7	8	9	10	11	12
Documentation	25%	22%	10%	10%	7%	0%	3%	13%	4%	3%	0%	2%
Total Number of Patients Assessed for Anxiety	41	37	18	17	13	0	5	22	7	5	0	4
Total Number of Patients in Surgery per Week	163	170	172	178	186	189	176	169	169	180	159	173

Note. Shows the percentage of anxiety documentation in Pre-Op per week of implementation.

Out of the documented assessments, 57 patients out of 169 patients experienced anxiety in pre-op.

Table 2

Anxiety Assessment Documentation in PACU

Week	1	2	3	4	5	6	7	8	9	10	11	12
Documentation	7%	9%	5%	2%	3%	0%	0%	1%	0%	1%	0%	0%
Total Number of Patients Assessed for Anxiety	12	16	8	3	6	1	0	2	1	2	0	0
Total Number of Patients in Surgery per Week	163	170	172	178	186	189	176	169	169	180	159	173

Note. Shows the percentage of anxiety documentation in PACU per week of implementation.

Out of the documented assessments, 9 patients out of 51 experienced anxiety in PACU.

Table 3

Use of Interventions in Pre-Op for Anxiety Management (n = 31)

Week	1	2	3	4	5	6	7	8	9	10	11	12
All Interventions	3	10	1	2	1	0	1	3	7	1	0	2
Non-Pharmacological Interventions	2	7	0	1	1	0	1	0	5	1	0	0
Pharmacological Interventions	0	0	0	0	0	0	0	0	0	0	0	0
Non-Applicable	1	3	1	1	0	0	0	3	2	0	0	2
Total Number of Patients in Surgery per Week	163	170	172	178	186	189	176	169	169	180	159	173

Note. Shows breakdown of number of patients who received interventions for anxiety

management per week in pre-op. Non-applicable indicates an intervention for anxiety

management was not specified.

Only 31 patients out of the 57 patients experiencing anxiety in pre-op received an intervention, where 18 received non-pharmacological approaches.

Table 4

Use of Interventions in PACU for Anxiety Management (n = 8)

Week	1	2	3	4	5	6	7	8	9	10	11	12
All Interventions	2	3	0	2	0	0	0	1	0	0	0	0
Non-Pharmacological Intervention	1	1	0	1	0	0	0	1	0	0	0	0
Pharmacological Intervention	1	2	0	1	0	0	0	0	0	0	0	0
Total Number of Patients in Surgery per Week	163	170	172	178	186	189	176	169	169	180	159	173

Note. Shows breakdown of number of patients who received interventions for anxiety

management per week in PACU.

Only 8 patients out of the 9 patients experiencing anxiety in PACU received an intervention, where 4 received non-pharmacological approaches. Whether an intervention was implemented or not for one patient was not indicated.

Discussion

Objective #1: To have 40% of patients documented and assessed for anxiety in pre-op. Only 8% (n = 169) out 2084 patients were assessed; therefore, this objective was **not** met.

Objective #2: To have 40% of patients documented and assessed for anxiety in PACU. Only 2.4% (n = 51) out 2084 patients were assessed; therefore, this objective was **not** met.

Objective #3: To have 15% use of non-pharmacological methods for anxiety treatment in pre-op. Only 31 out of the 57 patients experiencing anxiety received interventions, where 58% (n = 18) out these 31 patients received non-pharmacological intervention; therefore, this objective was **partially** met.

Objective #4: To have 15% use of non-pharmacological methods for anxiety treatment in PACU. Only 8 out of the 9 patients experiencing anxiety received interventions, where 50% (n = 4) out these 8 patients received non-pharmacological intervention; therefore, this objective was **partially** met.

Limitations- Noncompliance from nurses, anxiety assessment questionnaires not following algorithm.

Conclusion

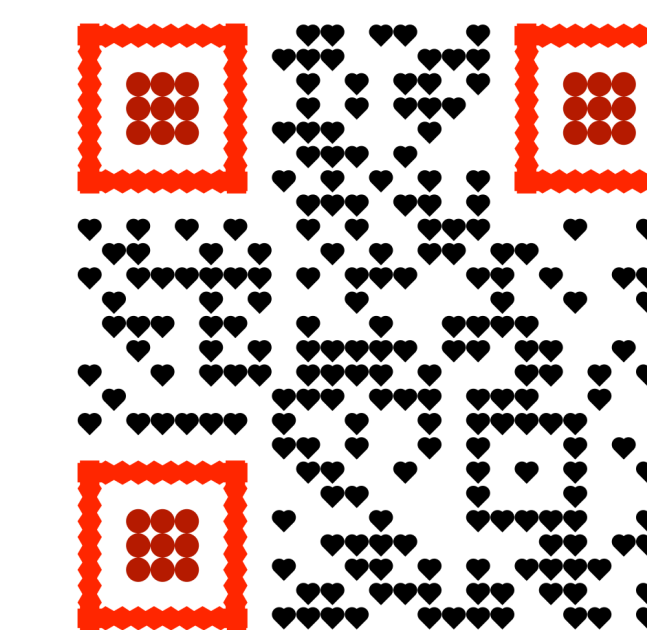
Value

The standardization of anxiety assessment would guarantee that patients are assessed the same way every time and not determined by the nurse caring for the patient. With the standardization of the documentation, there would be an objective baseline for all healthcare professionals, including surgeons and anesthesiologists. The standardization of anxiety management would provide a guide for novice nurses and ensure that care for all patients' anxiety is not missed or inappropriately treated as perceived pain. The perioperative nurse will feel empowered to provide patients with patient-selected interventions for anxiety and, in turn, empower the patient in their own care.

Impact

Opportunities with interdisciplinary collaboration related to the area of interest of anxiety in perioperative patients. Potential research questions or areas of interest would include a vast array of non-pharmacological interventions and orthopedic trauma patients.

References



Acknowledgements

God
 My Family: Papi, Mami, Cynthia, Javi, Leo, Baby Javi, Scruffy, Masa, Marci, Abuelita, Nito, Robinson, Jenny
 Bradley Faculty: Dr. Bloompott, Dr. Hendricks, Dr. Singh, Dr. Lucia, Dr. Smith
 Dr. Walloch
 My Practice Mentors: Dr. Jeffrey Smith & Dr. Rina Jain
 Scripps: Dr. Kristin Dixon, Kathy Malone, PreOp and PACU nurses