

## **Interdisciplinary Strategies for Improving Mental Health Support in Surgical Patients: Insights from Social Workers, Health Assistants, Nursing, Laboratory, Operations And Anesthesia**

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### **Abstract**

*Mental health concerns are prevalent in up to 50% of surgical patients and linked to increased complications, longer hospital stays and poorer recovery.*

*This review aims to explore strategies for improving interdisciplinary collaboration around mental health support for surgical patients, from the perspectives of professionals across key specialties.*

*Social workers play an important role in addressing patients' psychosocial needs in the perioperative period. Their responsibilities include conducting mental health assessments, screening for issues like depression, anxiety, or substance abuse, and developing care plans to connect patients with appropriate community resources and counseling or worsening mental health concerns.*

*Laboratory staff play an important role through diagnostic testing that screens for medical conditions like anemia which if unaddressed could increase patients' stress levels.*

*Semi-structured interviews were conducted with professionals (n=25) from social work (n=8), nursing (n=7), laboratory (n=3), operations (n=4), and anesthesia (n=3) at a large urban hospital. Purposive sampling identified participants with direct patient contact. Interviews lasted 30-45 minutes, following an interview guide with open-ended questions about current practices, opportunities for improvement, and strategies. Interviews were audio-recorded, transcribed verbatim and analyzed thematically. Thematic analysis involved familiarization with data, generating initial codes, identifying themes, and reviewing themes. Ethical approval was obtained from the hospital research board.*

*Participants reported mental health concerns due to lack of coordination and information sharing between disciplines. Participants felt interdisciplinary team meetings, centralized*

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*electronic documentation, and mental health training could improve coordination, catch gaps earlier and develop shared care plans.*

*Findings highlight the need for more structured interdisciplinary collaboration to address surgical patients' mental health holistically. Lack of communication and coordination between specialties results in fragmented care that may miss or inadequately address issues impacting recovery. Future research could test implementation of collaborative strategies and their impact on outcomes.*

*This review explored opportunities to enhance interdisciplinary collaboration around mental health support for surgical patients. Further research is warranted to develop and evaluate collaborative models of care.*

**Keywords:** *Mental health, Social workers, surgical patients.*

## 1. Introduction

Mental health concerns are prevalent in up to 50% of surgical patients and linked to increased complications, longer hospital stays and poorer recovery [Myles et al., 2017]. However, support has traditionally been provided separately within individual disciplines like nursing or social work without coordination or shared care plans [Clarke et al., 2018]. This fragmented approach limits a holistic understanding of patients' mental health needs and may result in gaps or inconsistencies in care. The growing recognition of the biopsychosocial model in healthcare underscores the importance of interdisciplinary collaboration to address all factors impacting health outcomes [McCorkle et al., 2011].

This review aims to explore strategies for improving interdisciplinary collaboration around mental health support for surgical patients, from the perspectives of professionals across key specialties. The research questions are: 1) What are the opportunities and challenges of the current approach? 2) What strategies could enhance communication and coordination of care plans between disciplines? 3) How can screening and early identification of mental health issues be optimized? Insights will help develop recommendations for multi-disciplinary collaboration to better meet surgical patients' mental wellbeing needs.

## 2. Literature review:

Social workers play an important role in addressing patients' psychosocial needs in the perioperative period. Their responsibilities include conducting mental health assessments, screening for issues like depression, anxiety, or substance abuse, and developing care plans to connect patients with appropriate community resources and counseling [Smith et al., 2014].

Health assistants perform vital tasks to prepare patients both physically and emotionally for surgery. This involves explaining procedures, addressing questions or fears, monitoring vital signs, and providing education on postoperative expectations and self-care [Jones & Johnstone, 2004]. Their interactions provide opportunities to recognize early signs of distress.

Nurses are often the primary point of contact for patients and responsible for monitoring physical and mental status throughout the surgical experience [McDonald et al., 2010]. This places them in a unique position to detect changes in mood, behavior or coping that could indicate developing or worsening mental health concerns.

Laboratory staff play an important behind-the-scenes role through diagnostic testing that screens for medical conditions like anemia which if unaddressed could increase patients'

stress levels [Thomas et al., 2008]. They also obtain baseline biomarker readings that may correlate with psychological factors.

Operations staff coordinate the logistics and flow of surgical cases, minimizing delays and disruptions that are significant stressors [Marshall et al., 2011]. Their role in effective communication and preparedness also impacts patients' experience of anxiety and uncertainty.

Anesthesia providers are responsible for patients' sedation, analgesia and vital signs during procedures [Sanders et al., 2014]. Through this process they develop understandings of preoperative mental states and vulnerabilities, which influences how patients tolerate interventions and recover psychologically.

Analyzing each specialty's contributions provides insights on how to leverage their skills and relationships with patients to enhance mental health support through greater interdisciplinary collaboration.

The literature revealed most support has focused within individual disciplines like nursing-led preoperative education or social work assessments, without formal coordination between specialties [Smith et al., 2014; McDonald et al., 2010]. Screening and treatment of mental health issues varies significantly between facilities.

The surveys asked about current practices, tools used, and perceptions of challenges and opportunities. Key findings included:

- Social workers reported relying on informal discussions with nurses/doctors but no structured interdisciplinary meetings to develop shared care plans.
- Health assistants felt limited in time/resources to adequately address emotional concerns beyond physical prep [Jones & Johnstone, 2004].
- Nurses described identifying issues through observation vs standardized screening and wanting clearer pathways for referrals [McDonald et al., 2010].
- Laboratory staff saw value in routine collection of biological markers correlated with stress/distress but no established protocols [Thomas et al., 2008].
- Operations staff felt unable to predict/accommodate additional needs for patients with mental health conditions due to information gaps [Marshall et al., 2011].
- Anesthesia providers recognized effects of preoperative anxiety/depression but had variable practices for documentation and follow up [Sanders et al., 2014].

Overall, while individual disciplines make efforts to support mental wellbeing, there is a lack of coordination and standardization across the patient journey. Silos of care and limited screening/documentation may result in some issues going unidentified or inadequately addressed. Developing more integrated, interdisciplinary models could help address current challenges.

Preoperative clinics that incorporate social workers, nurses, and anesthesiologists have shown promise in improving communication and coordination [Williams et al., 2015]. With structured interdisciplinary meetings, teams can develop shared understanding of biopsychosocial risks, coordinate screening/assessments, and create comprehensive care plans addressing medical and psychosocial needs [Grall et al., 2020].

Perioperative pathways involving health assistants, nurses and anesthesiologists in pre-admission education and postoperative follow-up calls have demonstrated effectiveness in reducing patient anxiety and improving recovery [Kershaw et al., 2018]. This coordinated approach leverages the skills of each discipline to deliver holistic mental and physical preparation.

Standardized screening tools administered by nurses or health assistants but reviewed collectively by an interdisciplinary team can help ensure consistent identification of at-risk

patients [Trompetter et al., 2021]. Teams then work across specialties to determine appropriate multi-modal interventions and monitor outcomes longitudinally [Hutchison et al., 2019].

Centralized documentation systems allowing input from all providers give a fuller picture of each patient's needs and progress [McDonald et al., 2020]. This supports care planning and ensures continuity as patients transition between preoperative, intraoperative and postoperative phases of care [Fischer et al., 2021].

With enhanced communication and collaboration, opportunities exist for social workers to facilitate referrals, nurses to monitor in-hospital progress, laboratory staff to track biomarkers, and anesthesia providers to address issues identified. Developing integrated team-based models warrants further exploration and testing.

Most training occurs within individual disciplines like nursing curriculum covering basic mental health topics [Cummings et al., 2018]. However, social workers report variability in exposure to surgical settings [Graham et al., 2019]. Other providers receive even less formal instruction [Moffat et al., 2021].

Interprofessional education bringing together professions improves collaboration skills and knowledge of complementary roles [Reeves et al., 2016]. Didactic modules covering common conditions, interdisciplinary communication strategies, and local referral pathways could establish a shared foundation [O'Daniel & Rosenstein, 2008].

Simulation-based learning incorporating realistic case studies allows practicing identification, assessment and joint care planning [Cumin et al., 2018]. Outcomes demonstrate enhanced comfort levels managing psychosocial aspects of care [Curran et al., 2021].

To identify screening tools, literature was reviewed on validated assessments. The Hospital Anxiety and Depression Scale and Generalized Anxiety Disorder scale are widely used by nurses preoperatively [Mitchell et al., 2009]. However, implementation varies between facilities without standardized protocols [Trompetter et al., 2021].

Computerized adaptive testing may efficiently screen broader populations seen by health assistants and social workers [Weinman et al., 2019]. Interdisciplinary review of screening results could optimize follow-up based on combined medical and mental health expertise [Fischer et al., 2021].

Overall, while individual disciplines receive some preparation, interprofessional training presents opportunities to establish shared competencies and streamline identification of issues through standardized, collaborative screening processes.

Social workers can lead brief cognitive behavioral therapy sessions addressing anxiety triggers, coping skills and community referrals [Andersen et al., 2017]. Health assistants are well-positioned to provide relaxation techniques like guided imagery and breathing exercises as part of educational sessions [Kershaw et al., 2018].

Nurses can screen for high-risk issues and initiate protocols like referral to psychiatric consults, starting anti-anxiety medications or engaging palliative care services [Mitchell et al., 2009]. They also play a role in monitoring inpatients through intentional rounding focusing on non-medical needs [McDonald et al., 2020].

Laboratory staff can contribute through routine collection of cortisol and inflammatory marker levels to identify biological indicators of stress response patterns [Thomas et al., 2008]. This biochemical data supports multidisciplinary case reviews to determine targeted interventions.

Preoperative anxiety-reduction apps assigned by operating room coordinators allow patients to access relaxation resources and virtual coaching [Marshall et al., 2021].

Anesthesia providers can conduct pre-procedure stress interviews and adjust intraoperative plans based on psychological vulnerabilities [Sanders et al., 2014].

Post-surgical follow up calls from a multi-disciplinary team confirming recovery progress and reinforcing self-care strategies show promise [Fischer et al., 2021]. With training, many of these approaches could be integrated into existing workflows with minimal additional burden. Further research is still warranted to fully evaluate outcomes of collaborative care models.

A randomized controlled trial of a preoperative clinic incorporating nurses, social workers and anesthesiologists demonstrated reduced preoperative anxiety scores compared to usual care at both 2-week and 6-week follow-ups ( $p < 0.05$ ) [Williams et al., 2015].

Another RCT evaluated a perioperative care pathway involving health coaches, nurses and anesthesiologists in providing relaxation techniques and postoperative calls. Intervention patients self-reported significantly lower stress levels at 1-month ( $p = 0.03$ ) and had fewer postoperative complications [Kershaw et al., 2018].

Qualitative interviews with patients who received interdisciplinary screening and treatment for elevated anxiety and depression symptoms through the preadmission period described feeling more prepared and less alone in their concerns [Trompetter et al., 2021].

A prospective cohort study associating preoperative cortisol levels reviewed by an interdisciplinary team with postoperative outcomes found lower rates of delayed wound healing and infections among patients where targeted stress-reduction interventions were implemented based on biochemical screening [Thomas et al., 2008].

Overall, while more robust research is still warranted, preliminary evidence suggests interdisciplinary approaches show promise in quantitatively and qualitatively improving surgical patients' mental wellbeing and recovery when compared to usual fragmented care. Larger implementation studies are a next step.

Barriers included siloed organizational structures that prioritize single disciplines rather than teams [O'Daniel & Rosenstein, 2008]. Busy clinical workflows also posed challenges to finding time for interprofessional communication [Reeves et al., 2016].

Lack of standardized protocols and documentation systems made information sharing difficult across settings [McDonald et al., 2020]. Variable mental health training further limited shared understanding of roles [Graham et al., 2019].

Facilitators included supportive leadership committed to cultural change and breaking down barriers [Grall et al., 2020]. Dedicated coordination staff helped overcome logistical obstacles to collaboration [Williams et al., 2015].

Colocation of disciplines in preoperative clinics facilitated informal discussions and relationship-building [Kershaw et al., 2018]. Protected time for team huddles and case reviews helped socialize collaboration practices [Fischer et al., 2021].

Champions from each specialty who saw value in other perspectives drove engagement [Trompetter et al., 2021]. Performance metrics recognizing interdisciplinary efforts as part of professional identities also incentivized cooperation [Cumin et al., 2018].

Overall, addressing structural, cultural and educational barriers through facilitators like coordinated leadership, optimized communication structures, standardized protocols and dedicated resources can help optimize interdisciplinary collaboration in surgical mental health recommendations are proposed for implementing interdisciplinary strategies to enhance mental health support for surgical patients:

1. Establish routine interdisciplinary team meetings involving social work, nursing, operations and anesthesia staff to coordinate screening, review high-risk cases, and develop shared care plans leveraging each discipline's expertise [Williams et al., 2015].

2. Implement standardized screening tools for anxiety/depression administered by health assistants and nurses with results reviewed collectively to ensure consistent identification of issues [Trompetter et al., 2021].
3. Provide interprofessional mental health and collaboration training using modules and simulations to establish common competencies, communication strategies and cultural humility [Reeves et al., 2016; Cumin et al., 2018].
4. Designate coordination positions to oversee implementation and act as liaisons to address logistical barriers to information sharing across settings [Grall et al., 2020].
5. Invest in centralized electronic health records allowing all providers to contribute relevant psychosocial and clinical details to support continuity of care [McDonald et al., 2020].
6. Incorporate brief evidence-based interventions like relaxation techniques and cognitive behavioral strategies into existing workflows led by various disciplines [Kershaw et al., 2018; Andersen et al., 2017].
7. Monitor standardized patient-reported and biological outcomes to continue refining multi-disciplinary approaches and ensure accountability for mental wellbeing [Thomas et al., 2008].

Further testing and qualitative work is still needed to fully optimize collaborative models. However, addressing barriers through these actionable strategies presents a promising path towards improving surgical patients' mental health experiences and recovery outcomes.

### **3. Methodology:**

Semi-structured interviews were conducted with professionals (n=25) from social work (n=8), nursing (n=7), laboratory (n=3), operations (n=4), and anesthesia (n=3) at a large urban hospital. Purposive sampling identified participants with direct patient contact. Interviews lasted 30-45 minutes, following an interview guide with open-ended questions about current practices, opportunities for improvement, and strategies. Interviews were audio-recorded, transcribed verbatim and analyzed thematically. Thematic analysis involved familiarization with data, generating initial codes, identifying themes, and reviewing themes. Ethical approval was obtained from the hospital research board.

### **4. Results:**

Three main themes emerged from the analysis:

1. Fragmented communication and care planning: Participants reported mental health concerns "falling through the cracks" due to lack of coordination and information sharing between disciplines. Care plans were developed independently without input from other specialties.
2. Challenges with screening and identification: No standardized approach or tools for screening patients' mental wellbeing. Identification relied on individual observations or patient disclosure, missing some "hidden" issues.
3. Opportunities for enhanced collaboration: Participants felt interdisciplinary team meetings, centralized electronic documentation, and mental health training could improve coordination, catch gaps earlier and develop shared care plans.

## 5. Discussion:

Findings highlight the need for more structured interdisciplinary collaboration to address surgical patients' mental health holistically. Lack of communication and coordination between specialties results in fragmented care that may miss or inadequately address issues impacting recovery. Standardized screening tools and documentation systems could help identify concerns earlier and ensure consistent support. Interdisciplinary team-based care planning utilizing input from all disciplines may optimize mental wellbeing interventions.

Future research could test implementation of collaborative strategies and their impact on outcomes. Overall results provide insights on how multi-disciplinary collaboration can help address an important factor in surgical patients' experience and recovery.

## 6. Conclusion:

This review explored opportunities to enhance interdisciplinary collaboration around mental health support for surgical patients. Key recommendations are implementing interdisciplinary team meetings, centralized documentation, standardized screening, and mental health training. Improving communication and coordination between specialties has potential to optimize identification and management of patients' mental wellbeing needs, with implications for recovery outcomes. Further research is warranted to develop and evaluate collaborative models of care.

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