Chapter 12: Interventions to Improve the Timely and Accurate Identification of Psychological Problems in Oncology Care

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Summary

The initiative aimed to enhance the identification and management of psychological problems among oncology patients at the Sultan Qaboos Comprehensive Cancer Care and Research Centre (SQCCCRC) by using the Plan-Do-Check-Act (PDCA) framework. Through standardized assessment tools, staff augmentation, technology integration, and continuous monitoring, the project significantly improved screening rates, timeliness, and accuracy of psychological interventions, ultimately enhancing patient care and staff satisfaction.

Key Points

Psychological well-being is crucial in cancer care, but many oncology centers struggle with inconsistent screening, inadequate resources, and a lack of standardized protocols, resulting in missed opportunities for early intervention.	The use of standardized psychological assessment tools like HADS and PHQ-9, along with the expansion of the mental health team and integration of tools into the Health Information System, significantly improved screening rates and the timeliness of interventions.	The project achieved notable improvements, including a 24% increase in psychological screenings and a rise in the proportion of patients receiving timely psychological interventions from 80% to 86%.	While the PDCA framework proved effective, ongoing efforts are needed to maintain staff engagement, adapt to technological changes, and continuously refine the approach to further enhance psychological care in oncology settings.

Project Charter

Project Charter	Details

Project Title	Improving the Timely and Accurate Identification of Psychological Problems in Oncology Care at Sultan Qaboos Comprehensive Cancer Care and Research Centre (SQCCCRC)
Project Sponsor	Sultan Qaboos Comprehensive Cancer Care and Research Centre (SQCCCRC), University Medical City, Muscat, Oman
Project Start Date	January 2024
Project End Date	June 2024
Project Purpose	To enhance the identification and management of psychological problems among oncology patients at SQCCCRC by implementing a structured approach using the PDCA framework. The project aims to standardize psychological assessments, augment mental health resources, integrate technology, and ensure continuous monitoring to improve screening rates, diagnostic accuracy, and timeliness of interventions.
Problem Statement	Despite the high prevalence of psychological issues among oncology patients, the timely and accurate identification of these problems remains suboptimal at SQCCCRC. Inconsistent screening practices, limited staffing, and inadequate integration of technology result in delayed interventions, negatively impacting patient outcomes and quality of life. A structured approach is needed to improve early detection and management of psychological problems in oncology care.
Project Goals and Objectives	1. Increase psychological screening rates by 20% by June 2024. 2. Ensure 90% of patients receive psychological screenings within three working days of admission. 3. Improve the accuracy and timeliness of psychological interventions, with 90% of patients receiving interventions within 48 hours of need identification. 4. Standardize the use of evidence-based assessment tools across the department. 5. Enhance staff training and expand the mental health team to meet patient needs.
Scope	Includes all psychological care activities for oncology patients at SQCCCRC, covering outpatient and inpatient settings. The project focuses on standardizing psychological assessments, increasing staffing, integrating technology into the Health Information System (HIS), and enhancing staff training. Excludes non-oncology departments and non-psychological interventions.
Key Stakeholders	Oncology Department Staff, Mental Health Team, Quality and Accreditation Department, Nursing Staff, Health Information System (HIS) Team, Patients, Hospital Management
Resources Required	Budget for staff training, technology integration, and mental health team expansion; personnel from relevant departments; IT infrastructure for HIS upgrades; data analytics tools.
Risks and Assumptions	**Risks:** Resistance to new protocols, limited availability of qualified mental health professionals, challenges in integrating new tools into the HIS.

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	Assumptions: Full support from hospital management, adequate funding and resources, active participation of all stakeholders, and effective communication across departments.
Success Criteria	Achieving a 20% increase in psychological screening rates; 90% of patients screened within three working days of admission; 90% of patients receiving interventions within 48 hours of need identification; successful integration of assessment tools into HIS; positive feedback from staff and patients; demonstrated improvement in psychological care metrics.

Introduction

Psychological well-being is a crucial component of comprehensive cancer care, profoundly impacting treatment outcomes and quality of life for patients. Cancer diagnosis and treatment are often accompanied by emotional and psychological challenges that can interfere with recovery and decrease treatment efficacy (Zimmermann et al., 2023; Wang et al., 2024). Despite the importance of addressing these psychological issues, many oncology centers face difficulties, such as inconsistent screening practices, inadequate resources, and a lack of standardized protocols for psychological care (Xie et al., 2024). These gaps can result in delayed or missed opportunities for early intervention, further complicating patient outcomes.

To improve psychological care, our oncology center implemented a targeted initiative to address the identified barriers. The initiative focused on standardizing psychological assessments, augmenting the mental health team, and integrating tools into the Health Information System (HIS) to enhance the efficiency and accuracy of the screening process (Doyle et al., 2024). By employing the PDCA cycle, we aimed to achieve continuous quality improvement in the timely and accurate identification of psychological problems, thereby providing more effective and comprehensive patient care.

The adoption of the PDCA framework enabled a structured approach to identifying existing gaps and implementing effective interventions. Key steps included standardizing evidence-based tools like the Hospital Anxiety and Depression Scale (HADS) and the Patient Health Questionnaire (PHQ-9), expanding mental health resources, integrating technology to facilitate screenings, and enhancing staff training to ensure consistency in care delivery (Wang et al., 2024). This comprehensive strategy was intended to improve screening rates, diagnostic accuracy, and the timeliness of interventions.

Problem Statement

Despite the known psychological challenges faced by oncology patients, timely and accurate identification of these issues remains suboptimal due to inconsistent screening practices, limited staffing, and inadequate integration of technology in care processes. These shortcomings often result in delayed interventions and compromised patient outcomes. To address these critical gaps, a targeted initiative using the PDCA framework was launched to improve the early detection and management of psychological problems in oncology care.
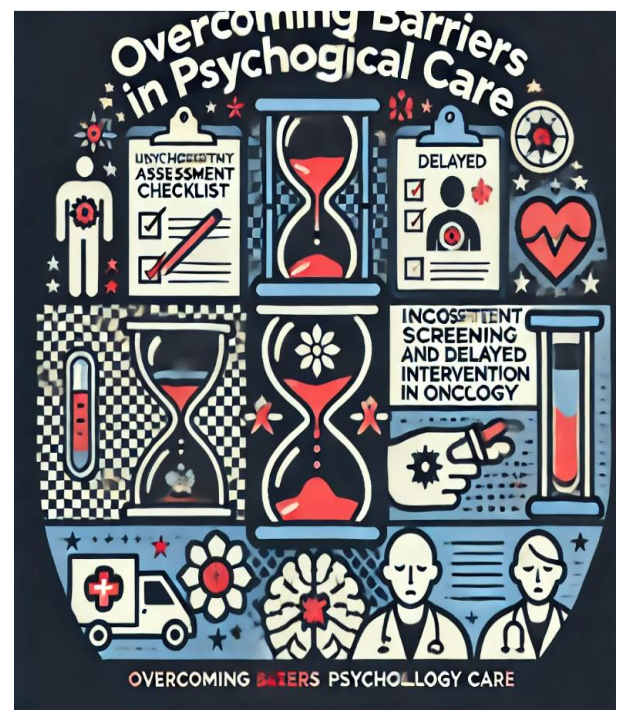
The initiative focused on overcoming existing barriers by standardizing assessment protocols, increasing staffing, and leveraging technology to facilitate efficient psychological screening and intervention processes. The primary objective was to enhance patient care by ensuring timely and

accurate identification of psychological issues, thereby improving overall treatment outcomes and quality of life.

Methods

Plan:

1. **Comprehensive Assessment:** Conducted an in-depth evaluation of current psychological screening and intervention practices at SQCCCRC to identify key areas for improvement.

2. **Gap Analysis:** Identified inconsistencies in assessment tools, insufficient staffing levels, and a lack of technology integration as major areas needing attention.

3. **Goal Setting:** Set clear objectives to increase psychological screening rates, enhance diagnostic accuracy, and ensure timely interventions for identified psychological issues.

Do:

1. **Standardization of Assessment Tools:** Implemented evidence-based psychological assessment tools, such as HADS and PHQ-9, consistently across the department.

2. **Staff Augmentation:** Expanded the mental health team to include more social workers, clinical psychologists, and psychiatrists to meet the increased demand for psychological support.

3. **Technology Integration:** Integrated screening tools and related documentation into the Health Information System (HIS) to streamline data management and facilitate prompt follow-up.

4. **Comprehensive Training:** Provided training to all relevant staff on the new protocols, tools, and processes to ensure consistent and high-quality care.

Check:

1. **Key Performance Indicators (KPIs):** Established KPIs to monitor the effectiveness of the interventions, focusing on screening rates, diagnostic accuracy, and timeliness of interventions.

2. **Data Analysis and Feedback:** Conducted regular data analysis and feedback sessions to evaluate progress, identify challenges, and inform subsequent improvements.

Act:

1. **Continuous Improvement:** Made targeted adjustments to intervention strategies based on data analysis and feedback, including refining staff training, optimizing staffing levels, and enhancing HIS functionality to support psychological care processes.
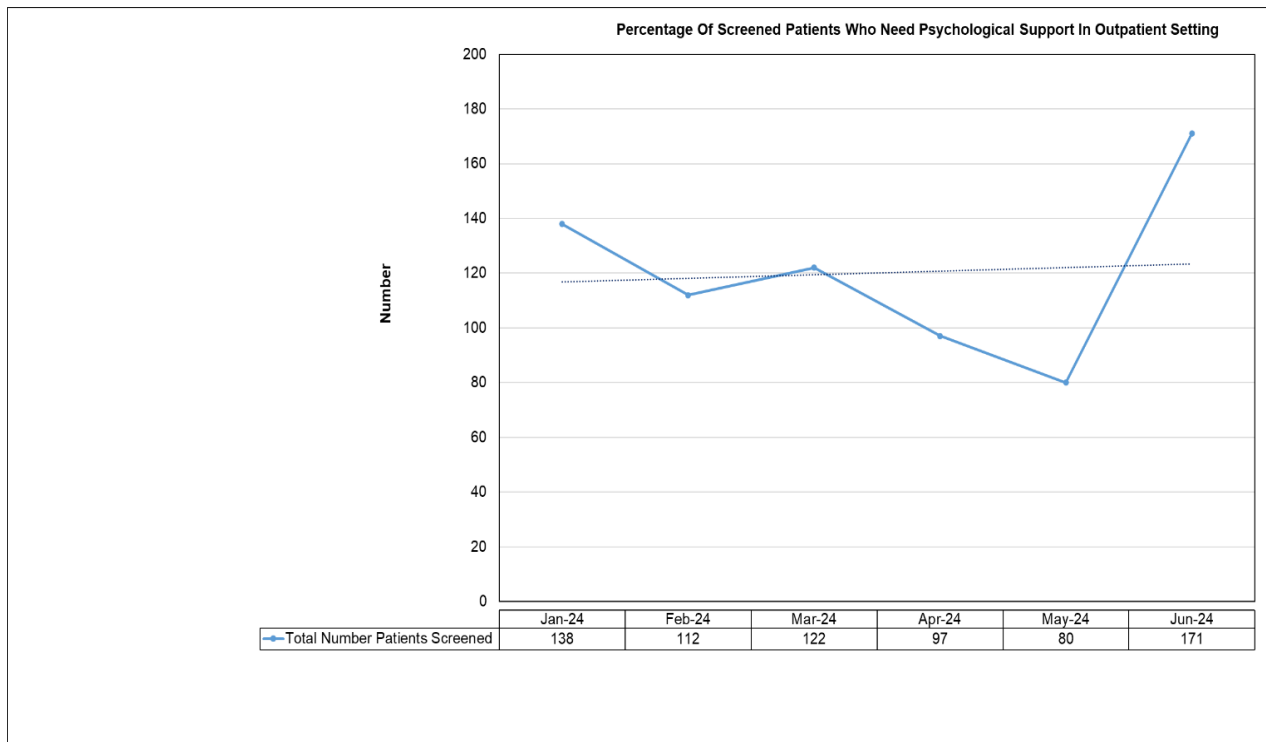
Results

The implementation of the PDCA cycle yielded substantial improvements in the psychological care provided to oncology patients.

1. **Increased Screening Rates:** Psychological screening rates rose from 138 patients in January 2024 to 171 in June 2024, attributed to the standardized use of evidence-based tools and HIS integration

2. **Improved Timeliness of Screenings:** The percentage of patients receiving screenings within three working days of admission improved from 47% in January 2024 to 66% in June 2024, reflecting enhanced staff training, increased personnel, and systematic process improvements

3. **Enhanced Accuracy and Timeliness of Interventions:** The proportion of patients receiving psychological interventions within 48 hours of need identification rose from 80%

in February 2024 to 86% in June 2024, due to early referrals by social workers to psychologists or psychiatrists for all positive cases

	Percentage Of Screened Patients Who Need Psychological Support In Outpatient Setting

	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24
Total Number Patients Screened	138	112	122	97	80	171

Percentage of Patients Had Psychosocial Screening Within 3 Working Days In Inpatient Setting

	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24
Percentage	47%	51%	43%	39%	32%	66%
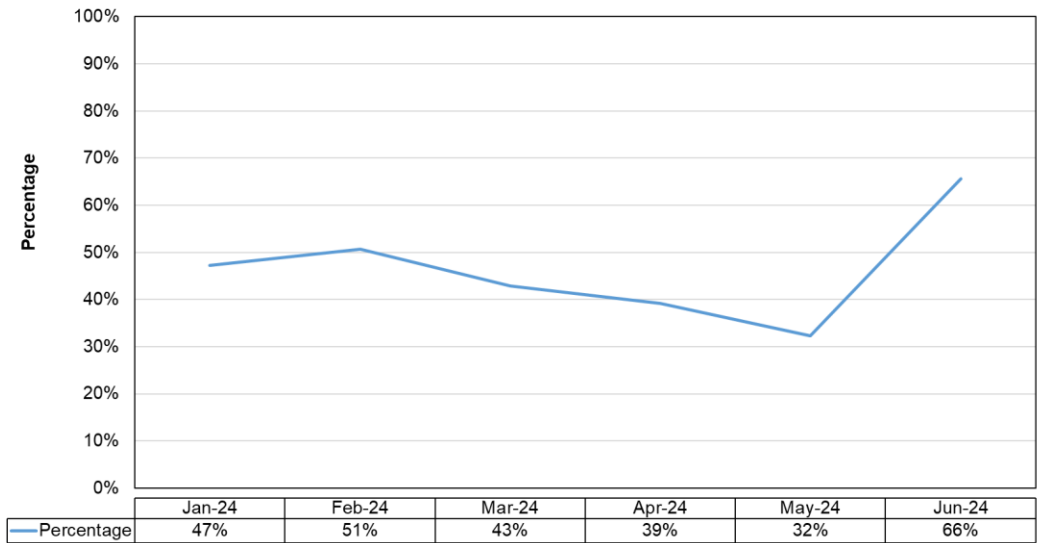
Percentage Of Patients With Identified Psychosocial Needs Receiving Psychology/Psychiatric Interventions In Inpatient Units Within 48 Hours

	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24
Percentage	93%	80%	82%	89%	86%	86%
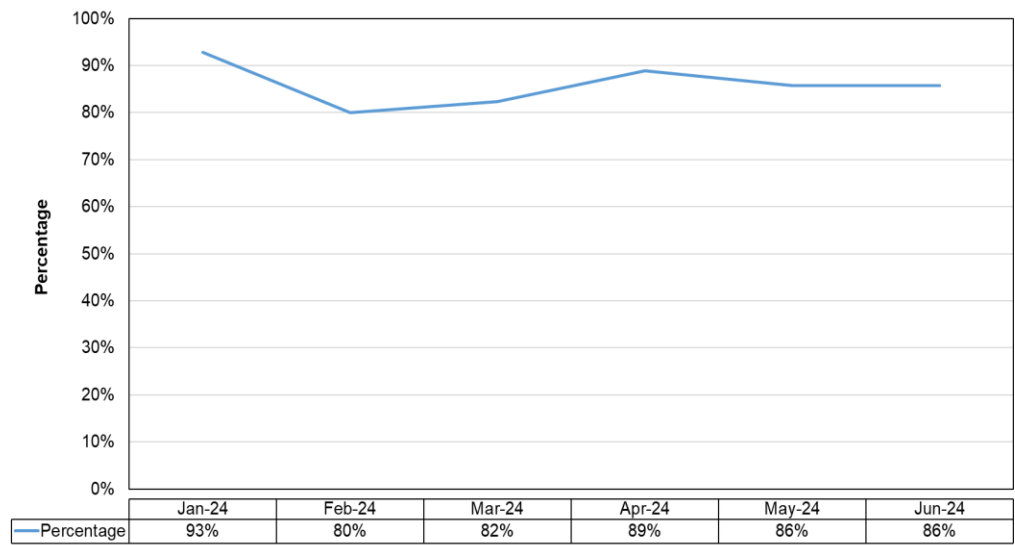
Discussion

The initiative's success underscores the effectiveness of the PDCA framework in enhancing the timely and accurate identification of psychological problems in oncology care. By standardizing the use of evidence-based assessment tools and integrating them into the Health Information System, the initiative addressed key barriers to psychological care, such as inconsistent screening practices and inadequate resources (Zimmermann et al., 2023; Xie et al., 2024). The increase in screening rates and improved timeliness of interventions demonstrate the importance of systematic approaches to quality improvement in oncology settings (Wang et al., 2024).

Moreover, the expansion of the mental health team and comprehensive staff training were critical to meeting the increased demand for psychological support and maintaining high standards of care. This approach aligns with findings from other studies that emphasize the need for adequate staffing and training to ensure effective psychological care (Doyle et al., 2024). The integration of screening tools into the Health Information System facilitated more efficient data management and timely follow-up, enhancing both diagnostic accuracy and patient outcomes (Xie et al., 2024).

However, ongoing challenges, such as maintaining staff engagement and adapting to technological changes, must be addressed to sustain these improvements. Future initiatives should focus on further refining the PDCA framework, incorporating feedback from staff and patients, and exploring additional technological solutions to enhance care delivery (Wang et al., 2024; Zimmermann et al., 2023).

Conclusion

The PDCA framework proved to be an effective strategy for improving the timely and accurate identification of psychological problems among oncology patients. The structured approach led to significant improvements in screening rates, diagnostic accuracy, and timely interventions, demonstrating the value of continuous quality improvement in enhancing psychological care. Continued refinement of these processes is essential to sustain gains and address ongoing challenges in delivering comprehensive oncology care.

References

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