Title

Analyzing inter-modality cross referral trends and drop-outs in a superspeciality comprehensive cancer centre.

Introduction

Retaining patients and ensuring continuity of care is an important component of care in oncology treatment. Timely interventions and follow-up can have an important influence on treatment outcomes and survival rates.[1] However, many patients discontinue or delay care, leading to gaps in treatment that may affect their recovery or overall health.[2] Studies have demonstrated that patient drop-outs can be associated with financial challenges, logistical issues, long wait times, and inadequate follow-up care.[3,4] In addition, cross-referrals whether within the hospital or to an outside facility can negatively affect patients' likelihood of adherence to recommendations, and alter their interactions within the healthcare system.[5] Hospitals are aiming to increase patient engagement and adherence and decrease patient drop-outs by enhancing digital technologies like online appointment systems, automated reminders, e-prescription systems, capturing automated advice, and tele-consultations.[6] However, it is still unknown whether these interventions will be effective in ensuring adequate follow-up care and optimizing referral pathways (process and environment). This analysis of hospital data will explore rates of drop-out, patterns of cross-referral in addition to understanding the surrounding operational efficiencies in oncology care delivery to generate actionable recommendations for improvement strategies aimed at improving patient retention and continuity in care.

Research Questions

- What are the most common reasons for patient drop-out during oncology treatment?
- What factors influence cross-referrals inside and outside the hospital setting ?
- How do financial, logistical, and communication challenges impact retention?
- How can hospital processes be optimised to boost patient retention and referral efficiency?

Objective

- To analyse patient dropout rates in oncology treatment. To determine the primary drivers of cross-referrals and their impact on treatment continuity.
- Assessing the impact of hospital workflows and digital tools on patient retention.
- Propose process improvements to reduce dropouts and optimise cross-referrals.

Materials & Methods

Study Type:
Cross-sectional descriptive study.

Study Setting:
60-bed super speciality cancer hospital.

Study Population:
Patients from radiation, surgical, and medical departments.

Inclusion Criteria

- Individuals who have visited the medical, surgical, or radiation departments in the last three months
- Individuals who have not shown up for follow-ups or appointments.
- Clients who began therapy but left early.
- Patients who had comprehensive cancer treatment referred patients to an outside facility or another department.

Exclusion criteria

- Patients who are simply getting palliative care
- Emergency room or inpatient patients without a history of follow-up.
- Missing or insufficient medical records.

Study Tools

- Electronic Health Records (EHR)- To examine referral information, follow-up adherence, and appointment history.
- Billing & appointment records- To examine patterns in follow-up reservations, cancellations, and no-shows.
- Cross-referral data - To analyze and find trends in internal and external referrals.
- Operational observations- To evaluate overall patient workflow, waiting times, and patient satisfaction
- Staff Interview - Oncologists, nurses, and administrative personnel to understand the difficulties associated with patient referral and retention.

Study Period
Three months.

Sampling Techniques and Sample Size

- **Sample Size:** A small, focused sample of 100–150 patients
- **Sample Method:** Purposive sampling is used to choose pertinent dropout and referral instances.

Data Collection Procedure

Analysis of hospital data:

- Anonymised patient records from the hospital's medical records system's(HMIS).
- Sort data according to cross-referrals, follow-up adherence, and patient dropouts.
- Examine digital intervention records, such as teleconsultation logs and appointment reminders.

Observing patients' workflow :

- Monitoring patient volume, wait times, and general effectiveness.

Interview with hospital employees:

- Discussions with administrative personnel, nurses, and oncologists to learn about problems and possible corrective measures.

Operational Definitions

- Patient drop-out: A patient who fails to show up for a planned follow-up
- Cross-Referral: When a patient is sent to a different department or outside hospital for additional care.
- Retention Rate/ Conversion Rate: The percentage of patients who attend their planned follow-ups
- Digital interventions: Hospital-based technological solutions that are intended to improve patient adherence, such as teleconsultations and automated reminders.

Data Analysis Plan

- Referrals and dropout rates will be analyzed using descriptive statistics.
- Trends in patient demographics, cancer types, budgetary considerations, and hospital procedures will be identified for comparative analysis.
- Thematic analysis will be done of staff feedback on ineffective referral practices and patient retention.

Ethical Considerations

- Prior to data access, the hospital ethics committee’s approval will be taken.
- Patient records will be kept anonymous and confidential.

- Eliminating direct patient interaction to reduce ethical issues with patient burden.

Implications of Research

- Enables practical understanding of the reasons behind inefficient referrals and patient dropouts.
- Helps oncology centers improve patient retention through data-driven tactics.
- Aids in streamlining hospital workflows and digital tools to improve patient-centered care.

References

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