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The Role of Operational Excellence in Enhancing Mental Health Service Delivery

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Author's contribution

The sole author designed, analyzed, interpreted and prepared the manuscript.

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Review Article

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ABSTRACT

Aim: To examine the role of operational excellence in enhancing mental health service delivery.
Problem Statement: Mental health has become a global subject of discussion not only because of societal welfare and economic development but also for public health. Mental health ailments are now on the rampage around the globe. Mental health ailments are now on the rampage around the globe.
Significance of Study: It is imperative to quickly address this rising issue of metal health disorders as this may propagate into harming societies, individuals and global economy.
Methodology: In the preparation of this literature review manuscript, consultations were made to different journals and literatures indexed relevant educational publishers. The selection of the relevant materials was based on their discussion and contribution to how mental health service delivery could be effectively enhanced.

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Discussion: The common causes and characteristics of mental health, neurological and substance use conditions have been identified to include shared determinants, shared neural pathways; categories and continuums; comorbidity and codependency and stigma discrimination. The influence of care setting and psychiatric diagnosis in mental healthcare was discussed. The respective pathways via which wellness recovery action plans can be achieved were stated summarily as home with support, specialist step down recovery/rehabilitation beds and specialist residential/nursing care. Frameworks to support operational excellence in mental health service delivery and essential system partnerships needed to attain the goal are discussed. The adoption of red and green days; acute inpatient mental health care for adults and older adults; discharge to assess; mental health recovery model; and wellness recovery action plan are the recommended tools in this regard. The discharge pathways as well as adequate planning and scheduling are considered as effective operational tools in this regard. In conclusion,

Conclusion: The implementation of operational excellence roles in enhancing mental health service delivery is highly essential. It is thus recommended that all the frameworks stated in the manuscript to support operational excellence in mental health service delivery should be implemented to achieve the set objectives.

Keywords: Mental health crisis; operational excellence; chronic disease services; health service delivery; mental health; neurological and substance.

1. INTRODUCTION

As stated by the World Health Organization (WHO), a condition of being in total mental, physical and social well-being is referred to as "health" [1]. This stresses the connections between various health dimensions indicating that progresses in one aspect usually lead to advantages in others. This emphasizes the significance of addressing all areas of health in order to attain maxima well-being and demands for universal methods aiming beyond the absence or presence of disease while consideration is given to other determinant factors. The integral health constituents and well-being are identified as brain health, mental health and substance use. Brain and mental health are vital sections of the concept of universal health coverage (UHC) emphasizing on every person's right to access necessary health care services which entails services for mental health, neurological and substance use (MNS) conditions in the absence of financial adversity. The identification of brain and mental health as major rights within UHC emphasizes the necessity to discuss MNS situations on the same basis with physical health situations [2]. Services for MNS conditions around respective universal health coverage packages of necessary services should be included by countries to attain UHC. The complete varieties of services should be included ranging from protection and promotion to treatment and recovery so as to allow persons to live fulfilled and industrious lives [3].

Mental health has been identifies as the fundamental part of well-being and health which has been ignored worldwide. Additionally, it was stated by WHO that around 450 million people are having mental disorder and approximately one-quarter of the population will be hindered from mental illness at some phases of their lifetime [4]. In another definition by WHO, mental health is a state of well-being where an individual identifies his or her own abilities, can cope with the normal life stresses and can productively and effectively work to make impacts in the society he or she finds himself or herself. Many people are however, aware and are able to recognize that they possess mental health disorder which originated from drug abuse, brain sickness and evil spirits possession in some parts of the world. Numerous public health encounters have triggered mental health issues such as communal violence, suicidal episodes, burnout of social and health workers and the recent COVID-19 pandemic. It is recommended that supports from stakeholders via mental health services provision together with positive decision/policy making should be made available to curb some unforeseen factors adversely affecting mental health [5].

Mental health has become a global subject of discussion not only because of societal welfare and economic development but also for public health. Mental health ailments are now on the rampage around the globe. It is imperative to quickly address this rising issue of mental health disorders as this may propagate into harming societies, individuals and global economy [6]. Failure to respond to this growing crisis could cause lasting harm to individuals, societies and economies worldwide. The recent COVID-19

pandemic has inflated this crisis separating provision for treatment and its need wide apart and thus, making it a global concern. In 2019, WHO estimated the percentage of people living with harsh mental health ailments with no treatment to be between 35% and 50% in developed countries while higher percentage range of 76–85% was recorded in in developing countries. About 13% of all global burden of disease was accounted for untreated mental health illness. The costs allotted for mental illness was estimated to $2.5 trillion in 2010 and was projected to be $6 trillion in 2030 according to the World Economic Forum. The costs of mental illness are more than that of any other non-communicable disease like chronic respiratory disease, diabetes, cardiovascular disease and cancer [7].

1.1 Connections Between Mental Health, Neurological and Substance Use (MNS) Conditions

The characteristics and causes of MNS conditions are similar. Factors that influence one condition usually influence others as well. Their existence usually overlaps one another and all of them are marked by substantial discrimination and stigma. MNS conditions possess the same economic and social factors such as poverty, violence, lack of work or education and hostile childhood experiences [8]. The accorded risk of MNS conditions is also affected by the same political, commercial and macroeconomic factors such as physical insecurity causing communal conflict. This signifies that similar prevention and promotion activities can be advantageous to all the three kinds of condition. MNS conditions entail similar neural pathways especially those for mood regulation, impulses controlling, rewards processing and decisions making. With reference to similar characteristics and causes, they face the same public health trials. They share hurdles having to do with care demand and they are harmfully influenced by the same gaps in resources, governance and services. Addressing the quests for one condition (such as raising awareness regarding anxiety and depression) can considerably decrease the risk of increasing other conditions such as risky intake of alcohol and epilepsy [9].

MNS are still constrained regarding their significance in public health guidelines relative to their impact despite their increasing recognition as a global priority. There is significant lack of appreciation and awareness among people at different levels of government and society requiring significant and continuous advocacy to overcome [10]. Public education on MNS conditions could assist in increasing their understanding, promoting well-being and resilience, and empowering people living with the three types of condition. Fig. 1 signifies the connections linking mental health, neurological and substance use (MNS) conditions. The interrelation of MNS in terms of the common causes and characteristics; and their shared needs and challenges are indicated. Shared determinants, shared neural pathways; categories and continuums; comorbidity and codependency and stigma discrimination are identified as the common causes and characteristics of MNS conditions. Their shared needs and challenges are identified to include poor awareness and appreciation; limited access and availability; human rights violations, limited budgets and scarce workforce. The shared strategies needed to address MNS conditions are promotion and prevention; biopsychosocial approach; treatment and recovery; and common policies and programmes [11]

1.2 Care Setting and Psychiatric Diagnosis in Mental Healthcare

The care of patients living with mental illness has been incorporated for substantial changes in the past two centuries. The policy of deinstitutionalization was implemented by many nations around the globe beginning from 1960s causing patients transportation from huge inpatient institutions into the community via the establishment of community services. Mental health care depends on its human resources and not on advanced equipment or technology [12]. To achieve a substantial mental healthcare, three groups of workforce are needed for a substantial collaboration between biomedical providers and psychosocial providers. The first group entails specialist workers such as psychiatric nurses, psychiatrists, psychologists, neurologists, occupational therapists and mental health social workers. The second group comprises non-specialist health workers like nurses, general doctors or practitioners, caregivers and lay health workers. The final group involves other professionals like community-level resources which include formally structured bodies such as indigenous and international non-governmental organizations [13].

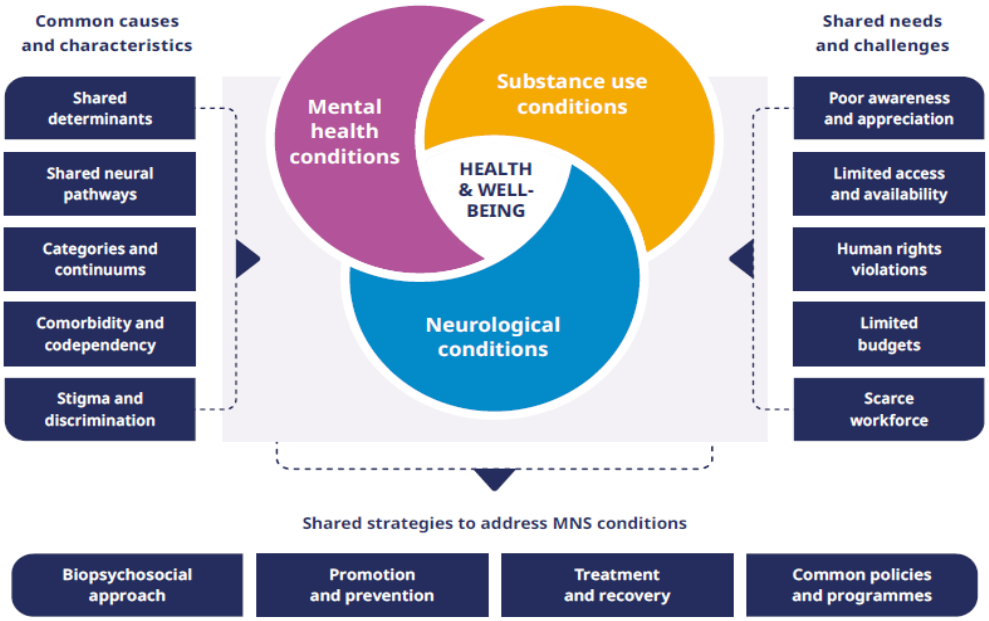

Fig. 1. Connections between MNS conditions [11]

A psychiatric diagnosis does not usually possess any particular identifiable psychological or biological markers unlike the remaining medicine. This is revealed via the diagnoses stated on the main psychiatric diagnosis manuals like statistical and diagnostic manual of mental disorders. The causes of different mental disorders do not possess similar scientific security in cases where symptoms are simplified via diagnosis unlike the other medicine [14]. The commonly applied diagnostic manuals have been constrained to kinds of criticisms, predominantly for being basically descriptive systems with reference to observed signs and self-reported symptoms. The two broadly applied diagnosis systems are progressively bringing into question issues related to clinical reliability, validity, prognoses uniformity and impact on treatment and outcomes. Suggestions have been made by numerous psychiatrists calling for a change from the present mental health diagnosis paradigm focusing on biomedical cause of mental disorders due to the evidence-based study. Based on research, many factors have been attached to increase in the causes of mental illness such as behavioural, cultural, biological and psychosocial factors interacting in sophisticated ways. Studies have also indicated mental illnesses outcomes to be undefinable and complex in nature having combinations of factors that are psychologically problematic [15].

This literature survey examines the fundamental principles of mental health service delivery and necessity for its operational excellence. The connections and interrelations between mental health, neurological and substance use conditions were examined. The influence of care setting and psychiatric diagnosis in mental healthcare was discussed. All these are stated in the introductory section. In section two, frameworks to support operational excellence in mental health service delivery and essential system partnerships needed to attain the goal are presented. The discharge pathways as well as adequate planning and scheduling are considered as effective operational tools in this regard [16].

2. FRAMEWORKS TO SUPPORT OPERATIONAL EXCELLENCE IN MENTAL HEALTH SERVICE DELIVERY

Some key steps have been identified which can enhance operational excellence in mental health service delivery. These include the adoption of red and green days; acute inpatient mental health care for adults and older adults; discharge to assess; mental health recovery model; and wellness recovery action plan.

Red and green days: The “Red and green days” has been developed as a framework in order to avoid wasting any days of the week while a

mentally-ill patient is hospitalized. This involves the introduction of daily multi-disciplinary meetings focusing on (1) the patient's care plans and (2) ascertaining the required interventions such as medication reviews, examination, check-ups, therapy and so on are being executed. These are to ensure that the patient's care is adequately monitored on daily basis (green days) instead of wasting the precious hours/days in the hospital waiting for medical practitioner's interventions (red days) [6].

Adults' acute inpatient mental health care: This framework is a new development supported by its publication in July 2023 which was equally updated same year in October. It makes provision for a wide range of targeted events which are to be executed less than 72 hours of patient admission in order to lower the time spent in the hospital by a patient battling with mental disorder. This involves the complete execution of general assessment and putting strength-based care planning into shape [10].

Discharge to assess: This is an organized hospital discharge technique put in place to ascertain that the elongated assessments period occurs in an adequate surrounding that can mimic the exact home of the patient. It increases the effectiveness' efficacy and efficiency of hospital discharge procedures for patients who do not need acute care but still require constant support and assessment [17]. This approach holds generally to hospitals handling different ailments. This framework was initially developed focusing on discharge from acute hospital locations. The approach gives room for quick discharge of patients from the hospital immediately they have been examined to be medically fit. Subsequently, their ongoing care and assessments are being determined and executed in a more appropriate location which is usually in their homes or carried out in a community location with little or no stress. The provision for discharge to assess services is free at the delivery location and can equally be rendered in a patient's house or in a bed-based location. They are, however, organized to be short term purposely to focus on enablement, rehabilitation and recovery [13]. The rationale behind this is to provide a more perfect examination of any continuous support and care needs in their normal living location while the hospital beds are made vacant for patients who are in need of acute care. It is essential that the community mental health team should work hand-in-hand with the council mental health social care team for the patients' assessments and follow up to be executed quickly and steadily less than 72 hours of being discharged in order to certify the accurate discharge support is granted 9].

Mental health recovery model: This model centers on the empowerment of patients with mental health situations to live a satisfactory life and also lead in a meaningful way. It is a person-centered technique to handling mental health care which is holistic in nature. The philosophy of mental health recovery model laid more emphasis on patient recovery rather than mere symptoms alleviation [18]. Under this, there is transition from the obsolete conventional approach which is deficit-based in nature to methods focusing majorly on empowerment, hope and individuals' ability to lead satisfying lives in spite of mental health situations and accorded challenges. The key objectives of mental health recovery model are stated thus: (1) improvement of life quality (2) validation of personal experience (3) encouraging patients to execute what that are capable of doing (4) assist patients in skills development in order to enable them stay well (5) handling both the patient and his diagnosis (6) advise patient on how to build resilience in tackling mental illness challenges and lastly (7) develop applicable procedures to support and assist patients when challenges arise [19].

Wellness Recovery Action Plan : The Wellness Recovery Action Plans shortened as "WRAPs" are instrument that assist patients' recovery via provision of a framework that monitors the wellness, periods of not being adequately well and periods when experiences can be distressing and uncomfortable. This spells out the kind of support that a patient needs at these specified periods. The key concepts behind WRAP are: (1) personal responsibility stating individuals required tasks to be executed in order to stay well (2) having the belief and hope of getting well at the earliest, staying well and achieve targeted dreams (3) receiving adequate support and giving out support in order to feel good and influence the quality of life (4) engaging in self-advocacy via reaching out to people to seek for assistance on recovery and wellness and lastly (5) education via learning of current experiences in order to aid decisions making on mental health wellness.

Fig. 2 represents the diagrammatic summary of a framework for achieving excellence in mental

health discharge. It displays the three pathways via which wellness recovery action plans can be achieved as previously discussed. The respective pathways were stated summarily as home with support, specialist step down recovery/rehabilitation beds and specialist residential/nursing care. Fig. 3 presents the essential system partnerships for excellent operational mental health service delivery. These include integrated care board (established by health board from the government), councils (adult social care), councils (housing for mental health practitioners), voluntary sector (non-governmental organizations), family and friend carers, mental health provider trust, community health trust, primary care and providers of care, support and housing. All these various units are required and should be provided and centered around a mentally-ill patient for excellent operational mental health service delivery [20].

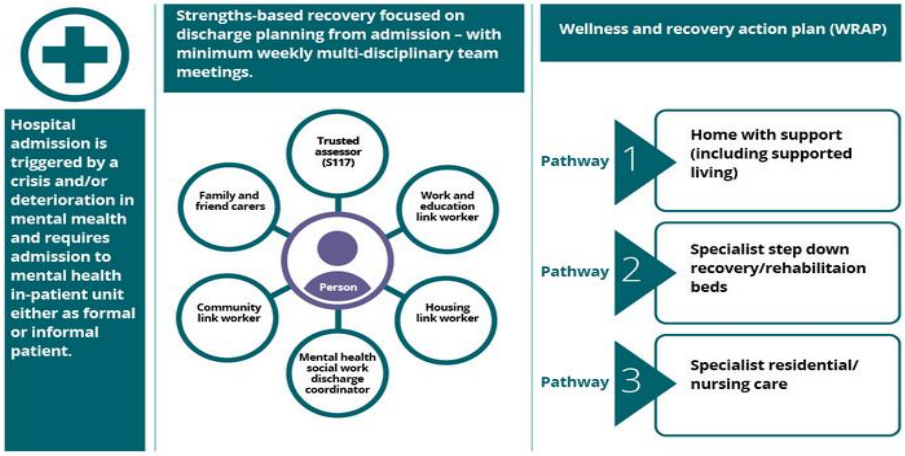

Fig. 2. A framework for achieving excellence in mental health discharge

Fig. 3. Essential system partnerships for excellent operational mental health service delivery [19]

3. DISCHARGE PATHWAYS AS EXCELLENT OPERATIONAL TOOLS TO ENHANCE MENTAL HEALTH SERVICE DELIVERY

The discharge planning is expected to begin right from the admission point via developing general in-patient treatment clarity, strengths-based recovery plan and friendly channel to durable community support requirements. Three discharge pathways are critically involved in achieving this.

First Pathway: The first pathway is targeted at returning the patients back home to their normal residence immediately on discharge with adequate support on ground. This is also applicable to patient leaving hospital purposely to be assessed by social care or NHS within the community. In cases where patients require easy access to mental health and physical health services, then the locally commissioned rehabilitation centers should have easy accessibility or probably have home recovery services. This pathway is applicable to patients intending calling on support from community mental health recovery, support for housing and tenancy. This is also not limited to supports having to do with primary care, packages, direct payments, mental health rehabilitation, education and work [12]. Equally, short term support is also involved which can be made available within an assisted housing scheme which is not registered for residential purpose. In cases of physical health needs, there should be easy accessibility to resources recovery and acute rehabilitation. There should be a well-spelt justification in cases of temporary accommodation for patients to return back to their personal accommodation [14].

Second Pathway: This pathway is adequate in scenarios where a continuous intensive support which goes beyond the capacity of the community is needed by a patient battling with mental ailments. This can be times of recovery or step-down rehabilitation purposely to support the person in returning back home after additional times spent on intervention(s). Second pathway could be in two forms namely; registered nursing/home care facilities or hospital beds. In this situation, there is usually periods of low intervention for the patients to return back home. Another preparation is made in cases where longer period support and care in a bedded location is needed. There is often quick accessible of locally commissioned bed-based rehabilitation for patients in need of mental health and physical health access [20].

Third Pathway: In cases where it is not likely for a patient to get adequate support at home, pathway three is recommended and adopted. Pathway three beds are therefore normally solely for patients who are not likely to recover satisfactorily to enable them to return home. Most times, they are already in residential or nursing care before admission. This does not restrict them from returning home but they are not expected to move again in cases where long term care is needed. The provisions accorded with the third pathway include broad range of nursing and residential support. This includes majorly dementia support emanating from extreme self-ignore linked to mental health [21].

3.1 Planning and Scheduling as Excellent Operational Tools to Enhance Mental Health Service Delivery

Planning and scheduling are critical operational tools that can enhance mental health service delivery. These are of various types. Strategic planning discusses the structural decisions purposely for a long planning possibility. Tactical planning addresses the conversion of the decisions of strategic planning into procedures which enhance the operational planning in mental health service delivery [22]. Operational planning entails temporary decision-making which deals with executing the tactical blueprints. Offline operational has to do with advance planning or operations while online operational planning handles reactive decision making based on unplanned future events. However, operating room planning and scheduling; physician scheduling; appointment scheduling; and home health care (HHC) routing and scheduling are essential when issues relating to mental health service delivery are raised [23].

Operating room planning and scheduling: The most substantial cost and revenue location is the operating theatre in a hospital which has significant impacts on the hospital's performance in general. Inpatient or outpatient and elective or non-elective are the two main categories of patients in a mental care hospital. Additionally, surgical scheduling and operating room planning handle many issues involving evaluation of the number of resource required to meet up with the demand; operating room capacity allocation to different medical disciplines; allocating particular

dates for operations; stating the operations start time and resources allocation [24]. However, the major challenges allotted with scheduling have been identified to emanate from operational level in terms of making decision on a patient level and assigning room and dates to mentally-ill patients.

Physician scheduling: The shortage of physicians has contributed immensely to the rising deficiencies in effective mental health service delivery and adversely affects physician scheduling in hospitals. Physician scheduling in hospitals has been categorized into three aspects: (1) rostering (creation of shift rosters), (2) staffing (estimation of composition and size) and (3) re-planning (short-term amendments to schedules) [7]. The major problems causing the challenges are classified as (1) financial (reducing wage costs, outside resource usage and overtime) and (2) non-financial (reducing request under coverage, optimizing employee preference, roster alterations). Other constraints are soft (negotiable) and hard (non-negotiable) based model classification. The soft constraints are related to (1) fairness (unpopular shifts distribution free weekends engagements) and (2) ergonomics (days off, weekends off, preference, shift duration boundaries, forward rotation) [15]. The hard constraints include single shift per period, meeting demand, minimum rest periods and restricted backwards rotation [3].

Appointment Scheduling: The influence of Outpatient Appointment System (OAS) on the effectiveness of mental health service delivery has been investigated and revealed. Appointment systems were classified using environment as the basis into (1) elective surgical care, (2) speciality care and (3) primary care [8]. The scheduling in surgical/operating theatre is either based on outpatient or inpatient. Generally, appointment scheduling is discussed based on specialist care and primary care. Operational decisions that have to do with plans implementation on an individual patient level is the main focus of OAS studies [6]. The implementation includes: (1) determination of appointment time and day, (2) allocation of patients to resources, (3) rejection and acceptance of patient, and (4) selection of patients from waiting list [25-27].

Home Health care routing and scheduling: Home health care (HHC) has become an encouraging and dependable area of research studies in healthcare services as numerous countries are now moving from a hospital setting to homes. HHC providers discharge broad mental health services which include: (1) medical social services, (2) supply of medical equipment, (3) care of healthcare provider, (4) pharmaceutical and laboratory services, (5) health aides, (6) transportation, (7) nursing, therapy, (8) volunteer care, (9) attendant care and (10) meal and nutrition support [19].

Multi-appointment scheduling in hospitals: There may be instances where patients having mental ailments may require visiting many resource kinds sequentially in a hospital setting for diagnosis or to receive treatment. Multi-appointment scheduling (MAS) in hospitals is still found limited presently in quite a number of hospital departments having systems that directly handle this. Allocated hospital resources under this are (1) diagnostic resources, (2) linear accelerators (needed for radiotherapy), (3) specialists, (4) chemotherapy chairs, (5) doctors, (6) medical devices, and (7) beds [28]. The departments in the hospital that are involved in multi-appointment scheduling to enhance mental health service delivery are (1) diagnostic facilities, (2) operating rooms, (3) oncology, and (4) rehabilitation. The types of patients having mental disorders that are identified under MAS are (1) emergency patients, (2) inpatient and (3) outpatient. The main problems accorded with outpatient procedure planning are patient no-shows and unreliable service times. Many workforces have targeted reducing the stay length when it comes to addressing inpatient planning. In the case of emergency patients, the major challenge is matching of emergency department with the scheduling diagnostic laboratories despite unforeseen arrival of patients having mental ailments [29].

4. CONCLUSION

Mental health has become a global concern calling for discussion not only as a result of societal welfare and economic development but also for public health. Mental health ailments are now on the rise around the globe. It is essential to speedily address this issue of metal health disorders as this may promulgate into harming societies, individuals and global economy. In this literature review, the fundamental principles guiding mental health service delivery and necessity for its operational excellence have been examined. The common causes and characteristics of MNS conditions were identified to include shared determinants, shared neural

pathways; categories and continuums; comorbidity and codependency and stigma discrimination. The influence of care setting and psychiatric diagnosis in mental healthcare was discussed. The respective pathways via which wellness recovery action plans can be achieved were stated summarily as home with support, specialist step down recovery/rehabilitation beds and specialist residential/nursing care. Frameworks to support operational excellence in mental health service delivery and essential system partnerships needed to attain the goal are discussed. The adoption of red and green days; acute inpatient mental health care for adults and older adults; discharge to assess; mental health recovery model; and wellness recovery action plan are the recommended tools in this regard. The discharge pathways as well as adequate planning and scheduling are considered as effective operational tools in this regard. In conclusion, the implementation of operational excellence roles in enhancing mental health service delivery is highly essential.

DISCLAIMER (ARTIFICIAL INTELLIGENCE)

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc) and text-to-image generators have been used during writing or editing of this manuscript.

COMPETING INTERESTS

Author has declared that no competing interests exist.

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