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Utilization of patient navigation model in eliminating the speed bumps to quality healthcare delivery in Nigeria: A theoretical perspective

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Abstract
The healthcare system in Nigeria is marred by unending barriers that result in loss of lives and an array of health complications. People travel long distances for medical attention and often wait endlessly to access medical care. These delays have usually resulted in a disconnection between diagnosis and treatment. The speed bumps in healthcare delivery constitute the barriers, disparities, and inequalities that patients encounter in their health-seeking pathways. Patient Navigation (PN) is a patient-centric model and intervention designed to eliminate all forms of barriers limiting access to quality healthcare delivery. This paper aims at discussing the importance of applying the Patient Navigation model in Nigerian healthcare services delivery as well as the social work roles in patient navigation. A theoretical review of relevant scholarly literature that showed the intervention roles of PN in other parts of the world and its significance in breaking healthcare barriers was conducted. Patient Navigation promises to be a useful quality healthcare delivery tool that is greatly needed in Nigeria's health sector. Social workers in Nigeria should take a leaf from the PN experiences in other parts of the world and brace up to adopt and integrate Patient Navigation into the mainstream of social work practice in Nigeria.

Keywords: patient navigation, barriers, disparity, healthcare delivery, social work

Introduction

Healthcare institutions and systems all over the world are primarily designed to provide equal, timely, efficient, and effective medical services to everyone. An effective healthcare system must meet the conditions of accessibility, affordability, availability, accommodation, and acceptability (Muhammed, Umeh, Nasir and Suleiman, 2013). In real experience, much is left to be desired of them especially in low and middle-income countries (LMICs) where the situation is characterized by both systemic and institutional barriers that have resulted in poor healthcare deliveries. Speed bumps to quality healthcare delivery are manifested in the form of inequalities and disparities in accessing medical care by the people. Patients in LMICs face structural barriers that are similar to those faced by underserved patients in the USA. Urban poor, rural, remote and indigenous populations in LMICs often cannot access timely medical care for chronic diseases because of lack of awareness, complex and fragmented healthcare system, low socioeconomic status, cultural limitations, and limited funding and human resources (Bukowski, et al., 2017).

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Lengthy waiting times are problematic for patients and healthcare workers alike. In clinics and hospitals across Africa, persistently long wait times have been linked to poor medication compliance, skipped appointments, delayed implementation of clinical programmes, and low health worker morale (Sastry, et al., 2015). Research evidence revealed that any diagnostic delay beyond three months for breast cancer patients reduces survival while early detection and treatment increases overall survival. Sadly, timely diagnostics care following a symptom or screening abnormality can be impeded by several factors including personal, logistic, and healthcare system barriers as well as lack of social support to obtain the needed care (Allen, Shelton, Harden and Goldman, 2008; Arndt et al., 2002; Lee et al., 2013; Mclaughlin et al., 2012; Richards et al., 1999; Wujcik and Fair, 2008; Zapka et al., 2010).

Diseases always occur within a context of human circumstances including economic status, social position, culture, and environment. These human circumstances can determine the length and quality of survival. The existence of health disparities poses a big challenge to the Nigerian healthcare continuum. There is a significant disconnect between discovery and delivery (Freeman, 2004). The Patient Navigation (PN) model is an innovative patient-centred healthcare service delivery intervention and model that focuses on the elimination of barriers, disparities, and inequalities to health-seeking pathways. Originally, it was designed in Harlem, New York in 1990 by Harold Freeman to help cancer patients to overcome the burdens of the cancer care continuum. However, the model has evolved in addressing general complexities in the healthcare system as in the case of maternal health, helping Human Immune Virus (HIV) patients travelling long distance to access care, expanding access to dialysis for kidney patients, supporting caregivers, maintaining adherence support services and many more (Akullian, Mukose, Levine and Babigumira, 2016; Harriet and June, 2017; Jones, et al., 2016; Scanlon and Vreeman, 2013). As PN evolved, it has taken a variety of forms as dictated by the needs of the patients as well as the experience of the institution/setting. To achieve the expected outcome of PN, social workers, case managers, laypeople, and nurses have always been used at different capacities as patient navigators (Wilcox and Bruse, 2010). Social workers' involvement in patient navigation requires them to be highly responsive and responsible in all dimensions of the model. Their understanding, knowledge, creativity, and pro-activeness are needed for effective patient navigation programme in Nigeria (Darnell, 2007). This paper gives a descriptive view of the patient navigation model, its usage in eliminating barriers and delays in health-seeking pathways in Nigeria, and the social work implication of the intervention.

Methods

This study adopted a descriptive approach and a review of the literature. The survey of scholarly literature that is both theoretical and empirical was carefully searched and sourced electronically from major scientific databases such as Pub Med, Science Direct, Medline, and Google Scholar among others. The keywords used in completing the searches are "healthcare barriers", "disparity and inequality", "patient navigation", "roles of patient navigators", "healthcare disparity in Nigeria", "patient navigation programmes in Nigeria", "patient navigation theories", and "the importance of patient navigation" with due attention focused on literature published from the year 2000 to

2019. To achieve clarity in the presentation of the results of this review, themes were developed to aid understanding of the concepts. The themes include perspectives on healthcare barriers, disparity, and inequality. Others include causes of healthcare disparity, the concept of patient navigation, the historical development of patient navigation model, and goals and principles of patient navigation.

Results

Perspectives on healthcare barriers, disparity, and inequality

Globally, profound advances in chronic disease screening, reductions in the prevalence of risk factors, and the development of more effective treatments have positively contributed to increased longevity and quality of life among survivors of chronic disease conditions. However, despite these improvements, there are still disparities, barriers, and inequalities occasioned by race/ethnicity, socioeconomic status, and social injustice that are challenging the effect of disease prevention, incidence, treatment, and mortality rate (Krok-Schoen, Oliveri and Paskett, 2016). The human circumstances by which diseases occur can determine the length and quality of survival. The existence of health disparities poses a challenge to the scientific community and it's a moral and ethical dilemma for nations (Freeman, 2004). In Nigeria, for instance, over the years there has been a growing lack of confidence in the primary healthcare centres (PHCs) over their inability to provide essential health services and commodities to individuals and communities that are timely, closer, acceptable and sustainable. The poor utilization of PHCs in Nigeria as revealed in a study by Muhammed, Umeh, Nasir, and Suleiman (2013) is attributed to lack of essential drugs, high cost of services as well as poor and inadequate infrastructure in PHC facilities.

The complexities of the healthcare system in Nigeria is obvious, as it is evidenced in the disparity in which facilities are provided by the government. With a public-funded healthcare system, one should expect the availability and free delivery at the point of use, but in reality, the situation is elusive. Healthcare disparities are manifested in inequalities and social class differences in the provision and access to healthcare services in Nigeria. Lack of a structured healthcare system and the issue of brain drain which has seen the country's top brains move to other countries in their numbers are conditions in which the poor and the disadvantaged bear the brunt of the poor health system in Nigeria. Hence, to ensure access and inclusiveness, the health system needs to be structured to allow the poorest poor in remote villages access to the needed healthcare they seek without worrying about cost (Audu, Ojua, Ishor and Abari, 2013). One major driving force of healthcare disparities in Nigeria is the gaping inequalities in financial access to healthcare, and a situation where the functionality of the health insurance system is epileptic, make the situation even more precarious. The problem, therefore, is health financing as there is already the existence of different types of facilities, levels, providers, types and ways through which health services are provided (Audu, Ojua, Ishor and Abari, 2013; Chukwudozie, 2015).

Disparities commonly exist in the access to subsidized healthcare services such as people living with HIV/AIDS (Croome, Ahluwalia, Hughes and Abas, 2017; Olaleye, Ogwumike and Olaniyan, 2013; Scanlon and Vreeman, 2013); dialysis for people with chronic kidney disease (Etheredge and Fabian, 2017; Flood, Chary, Austad, Garcia and

Rohloff, 2017); age-related diseases (Yamada, Chen, Murata, Hirai, Ojima, Kondo and Harris, 2015); among minority groups (Ren, Qian, Duan, Zhao, Pan and Yang, 2017); and specialized groups like women and children (Learmonth, De Abreu and Horsfall, 2013; Olowokere and Okanlawon, 2016; Yesuf, Kerie and Calderon-Margalit, 2014). Evidence from research as indicated by the authors above are pointers to the reality and existence of healthcare disparities, inequalities, and barriers in every part of the world. However, while nations are devising means of tackling the challenges, the situation in Nigeria is different as the gap keeps widening, hence the need for a proactive approach in the healthcare delivery continuum.

Causes of healthcare disparity in Nigeria

Healthcare disparities occur when beneficial medical interventions are not shared equally by all. Health disparities are caused by a complex interplay of low economic status (poverty), culture, and social injustice, with poverty playing the dominant role. Many patients, especially the poor, the uninsured, and those who are culturally different, meet significant barriers to obtaining timely health care. These barriers include but are not limited to financial, communication, medical system, transportation, and emotional barriers. These causal factors impact on all aspects of the healthcare continuum starting from prevention, detection, diagnosis, treatment, and survival even to end-of-life. Principally, disparities and inequalities occur in individuals or populations who experience one or more of the following circumstances: insufficient resources, risk-promoting lifestyle and behavior, and social inequalities (Freeman and Rodriguez, 2011).

Poverty as the principal cause of disparity is characterized by substandard housing, inadequate information and knowledge, risk-promoting lifestyles, attitudes and behaviours, and diminished access to healthcare. Cultural factor embodies shared communication systems, similar physical and social environments, common beliefs, values, traditions, and world views, and similar lifestyles, attitudes, and behaviours. Culture determines how women are regarded in many societies and this affects the health-seeking behaviours of women especially as it relates to child and maternal health. However, culture may augment or diminish the expected negative effects of poverty. Social injustice is critical in creating and maintaining health disparities, particularly among racial and ethnic minority populations. Ethnicity is one of the most defining issues in the history of many nations especially in Nigeria (Nnoli, 1978). In our society, we value and behave toward one another through a powerful lens of "ethnicity". This can create a false assumption that may result in serious harm to members of some racial and ethnic groups. A good understanding of the complex and overlapping interplay of poverty, culture, and social injustice underscores the challenge of reducing care disparities and could as well lead to strategies for eliminating these disparities (Freeman, 2004).

The concept of patient navigation

Patient Navigation (PN) is both a model and an intervention. It is based on the four components of care management or case management model namely; identification of problems, identifying individual barriers to receiving care, development of an individualized plan to addressing the barriers that are identified, and tracking or following each case through the resolution of the problem (Freund, et al 2008). Patient

Navigators are advocates who interface with patients to identify and remove barriers to completing follow-up for cancer-related care (Nonzee, et al., 2012; Wells, et al., 2008). PN was a term used to describe the case management of patients in need of cancer screening or with cancer screening abnormalities but it is now been widely used to describe a broad array of roles and functions, from traditional administrative assistant positions, community outreach workers, social workers, nurses and patient advocates (Freund, et al., 2008). It offers a support system for people helping people, alleviating the burden of patients seeking care in a "broken" healthcare system (Freeman, 2004).

At inception, PN aimed at providing support and guidance to persons with abnormal cancer screening or new cancer diagnosis in accessing the cancer care system; overcoming barriers; and facilitating timely, quality care provided in a culturally sensitive manner. It was intended for those who are most at risk for delays in care including racial and ethnic minorities and those from low-income populations (Freeman, 2004). However, PN has evolved over the years as a strategy to improving outcome in vulnerable populations by eliminating all forms of barriers to timely diagnosis and treatment of cancer and other chronic diseases such as viral hepatitis, diabetes, HIV/AIDS, kidney diseases, mental health amongst others (Freeman and Rodriguez, 2011; Freund, et al., 2008). In an attempt to improve health outcomes for patients with chronic diseases, including cancer, diabetes, and cardiovascular issues, the then President of the United States of America, George W. Bush signed into law the Patient Navigator Outreach and Chronic Disease Prevention Act of 2005. This law requires patient navigators to facilitate the involvement of community organizations to enhance access and decrease barriers to quality healthcare, as well as to provide outreach to vulnerable groups (Desrosiers, Mallinger and Bragg-Underwood, 2016). The PN scope has been expanded to be applied across the entire healthcare continuum, including prevention, detection, diagnosis, treatment, and survivorship to the end of life. The outcome of patient navigation is implicated in both primary and secondary climes. The primary outcomes include timeliness to diagnosis, timeliness to treatment, quality of life and patient satisfaction, and cost-effectiveness; while the secondary outcomes are: completion of therapy, quality care, and inclusiveness (Freund, et al, 2008). The efficacy of patient navigation has been over the decades validated as shown through studies and has impacted on the timeliness of care, patient satisfaction, patient feedback on barriers to care, patient quality of life and treatment outcomes (Phillips, Tom, Bularzik and Simon, 2014).

Historical development of patient navigation model

The development of PN as a healthcare intervention model began with the findings of the American Cancer Society (ACS) with a National Hearing on Cancer in the poor conducted in 7 American Cities in 1989 (Freeman and Rodriguez, 2011). The hearings were designed to understand the unique challenges faced by disadvantaged populations in accessing the complex processes of prevention, diagnosis, and treatment of cancer. The result revealed that poor people face significant obstacles to accessing cancer care services which prevent them from obtaining needed care, including;

(i) widespread financial barriers such as being unable to afford health insurance or Medicare ineligibility; losing employment and lack of affordable cancer services;

(ii) logistical barriers such as lack of transportation, living at a far geographical distance from healthcare, lack of adherence support system, and lack of understandable cancer information; and
(iii) socio-cultural barriers such as limited social support and inadequate health literacy (Wells, et al., 2008).

Against the backdrop of the above situation, in 1990, Dr. Harold Freeman in partnership with the ACS initiated and flagged off the first Patient Navigation programme in Harlem, New York. The pilot programme focused on the critical window of opportunity to save lives from cancer by eliminating barriers to timely care between the point of a suspicious finding and the resolution of the finding by further diagnosis and treatment (Wells, et al., 2008, Freeman, 2011; 2004). Before the PN intervention, in a 22-year period ending in 1986, 606 patients (94% black) with breast cancer were treated at the Harlem Hospital Centre in New York City. All patients were of low economic status, and the result showed that only 6% had stage 1, 49% presented with stage 3 and 4 and the 5-year survival rate was 39%. But after the intervention the result dramatically improved that of 325 breast cancer patients, 41% had stage 0 and 1, 21% had stage 3 and 4, and the 5-year survival was 70%. While the model programme was based on experience with breast cancer, PN can be applied to the diagnosis and treatment of all cancers and other diseases (Freeman, 2011). Since its origin in Harlem in 1990, the concept of patient navigation has been widely adopted and applied in various forms at hundreds of healthcare sites throughout America as well as abroad (Freeman and Rodriguez, 2011).

Goals and principles of patient navigation

From inception, the goal of patient navigation is to facilitate timely access to quality cancer care that meets cultural needs and standards of care for all patients (Freund, et al., 2008). Freeman (2004) stated that primarily, PN aims to save lives and to do that first, provision of outreach and education programmes that gives information about the need for an examination. Second, provides access to examinations including screening of all kinds, and lastly ensure that any positive findings receive further diagnosis and treatment on a timely basis. Accessing the needed healthcare is always marred with difficulties for patients with chronic diseases, hence as a "barrier-focused" intervention model, PN works towards eliminating the barriers and assures that an individual with a suspicious finding receives timely access to care (Paskett, Harrop and Wells, 2011; Freeman, 2004). One of the driving forces for the momentum gained by PN was its standards and principles of patient-centredness. The applicability of the principles of PN has sustained the focus and importance of the model for decades since the introduction. According to the founders of PN as contained in a report by Freeman and Rodriguez (2011), the principles of PN include:

- Patient navigation is a patient-centric healthcare service delivery model that focuses on the promotion of timely movement of an individual patient through an often -complex healthcare continuum. The individual's journey of the healthcare continuum begins in the neighbourhood where he/she lives, to a medical setting where an abnormality is detected, a diagnosis is made, and then treatment rendered. And of course, the journey continues from rehabilitation and survivorship to the end-of-life as the case may be.

- Patient navigation premise on the principle of service to virtually integrates a fragmented healthcare system for the individual patient. Patient care for those with chronic diseases are usually delivered in a fragmented manner, hence, PN has the potential of being the guiding force promoting the timely movement of the patient through a complex healthcare system.
- The core function of patient navigation is the elimination of barriers to timely care across all segments of the healthcare continuum. One-on-one relationship between navigators and patients make this function most effective.
- Patient navigation should be defined with a clear scope of practice that distinguishes the role and responsibilities of the navigator from that of all other providers. Navigators should be integrated into the healthcare team to promote a maximum benefit for the individual patient.
- Delivery of patient navigation services should be cost-effective and commensurate with the training and skills necessary to navigate an individual through a particular phase of the care continuum.
- The determination of who should navigate is based on the level of skills required at a given phase of navigation. There are levels that services may be provided by trained lay navigators and that which require navigators who are professionals like nurses and social workers.
- In a given system of care there is the need to define the point at which navigation begins and the point at which navigation ends.
- There is a need to navigate patients across disconnected systems of care, such as primary care and tertiary care sites. PN serves as a process that connects disconnected healthcare systems.
- Patient navigation systems require coordination. In larger systems of patient care, this coordination is carried out by assigning a navigation coordinator or champion responsible for overseeing all phases of navigation activity within a given healthcare system.

Patient navigation is therefore a healthcare delivery support system with the principle function of eliminating barriers to timely delivery of healthcare for individual patients across the healthcare continuum (Freeman and Rodriguez, 2011).

Discussion

Evidence from reviewed literature on patient navigation shows that the model is practice-based with positive results in addressing issues of barriers and inequality in health service delivery. The responsibilities and proper implementation of the patient navigation intervention for quality and timely healthcare service delivery to the underserved in Nigeria fall critically within the purview of human-focused professions such as the social work profession. Naturally, social workers due to their professional training are enlisted along with other healthcare workers such as nurses, case managers, and community health workers (CHW) even laypeople as patient navigators (Wilcox and Bruse, 2010). Implicated in the values and ethical principles of social work are the importance of client-centredness which also forms the basis for the development of the PN model that is also patient-centred. The social work value of worth and dignity of the individual, service, social justice, and competence are in tandem with the ethos of the PN model that targets and focusses on helping the poor, the vulnerable, the

disadvantaged, and the minorities in accessing the desired healthcare in the difficult health-seeking pathway of the Nigerian health system (Uzuegbu, Iyiani, Obasi-Igwe, Anazonwu and Ajibo, 2017). Patient navigators are patients' advocates and health facilitators, they defend the patients in the face of systemic and structural barriers to healthcare. It is important to note that the inability of patients to access the desired healthcare services is a form of human rights abuse and denial, hence, social workers as navigators defend and protect the rights of the defenseless patients in a rigorous healthcare system. This falls within the anti-oppressive and non-discriminatory social work practice as espoused by Okoli, Agwu and Okoye (2017). Receiving quality care in Nigeria for any of the chronic health conditions is usually a tortuous experience that involves lengthy pathways starting from the point of diagnosis at the primary or secondary level up to the point of treatment at the tertiary level. Patients must be helped in this process to avoid any form of disconnection and skipping of treatment appointments.

Social workers as navigators understand the psychosocial moods of the patients and as such are better prepared in providing such services like counselling, social and emotional support that provides strength the patients and the caregivers need to be strong and hopeful. Counselling exhibit a special position in addressing barriers to access to healthcare such as societal norms, pressure, and traditional practices. Social workers are strategically empowered and well-positioned to offer counselling to patients with chronic health conditions and their caregivers (Muchacha and Mthetwa, 2015; Okoye, 2019). Providing adequate care for patients with chronic illnesses such as cancer goes beyond treatment, it involves rehabilitation and reintegration. The patient navigation model also includes follow up and post-treatment intervention to ensure an enabling environment for full recovery and rehabilitation. Social workers as navigators are masters in the provision of follow up services to enable patients' access to social and environmental support needed for a full recovery. The PN intervention covers prevention, treatment and reintegration or end-of-life care as the case may be. Social workers lead awareness campaigns and public health promotions for the prevention of the prevalence of chronic health conditions. Social workers engage in social marketing to encourage healthy behaviours in the community. Social marketing has the strength that it reaches to diverse population groups and confronts societal barriers to disease prevention. It entails strategies such as community- based health promotions and advertising that support or encourage healthy living and strengthen the perception of access to quality healthcare (Muchacha and Mthetwa, 2015). Social workers as patient navigators are also proficient in providing advisory and supervisory roles to ensure competence development of navigators for effective intervention outcome. In situations where social workers were not directly involved in providing patient navigation services owing to their level and year of experience, they supervised a patient navigator, and also provided clinical interventions for individuals with depression. Patient navigation is a mixed bag that contains different professionals as well as laypersons as navigators, therefore, social worker supervises the lay patient navigator and served as a liaison between the lay patient navigators and case managers. In some cases, social workers can serve as team leaders and provide support and supervisory assistance to lay navigators in addition to providing patient navigation services directly (Browne, Darnell, Savage and Brown, 2015).

In a 2010 position statement on patient navigation, the Oncology Nursing Society, the Association of Oncology Social Workers, and the National Association of Social Workers in the US together outlined best practices for social work and nursing professionals involved with patient navigation. They asserted that both nursing and social work skills could be enhanced through additional training in patient navigation processes including conducting community assessments and the identification and crafting of interventions to resolve systems barriers that interfere with timely access to needed care and services. The group concluded that social workers, nurses, and non-clinically licensed navigators function together in interdisciplinary teams to produce the best patient outcomes. By implication of the position statement, social work is a primary force impacting healthcare systems for the benefit of patients in the current environment, and as such, must continue to take leadership in improving patient care and outcomes (Desrosiers, Mallinger and Bragg-Underwood, 2016). Social workers, therefore, are part of the multidisciplinary and interdisciplinary teams that qualify as patient navigators. Social workers as part of interdisciplinary teams, are designated to work on more complex cases and sometimes assigned the responsibility of linking patients to community resources, enhanced communication between physicians and patients and provide community resource navigation to meet patient needs (Browne, Darnell, Savage and Bown, 2015). The impact of patient navigation is targeted towards patient populations at higher risk of not receiving adequate chronic care services due to cultural, economic, geographic, or social disparities (Paskett, Harrop and Wells, 2011). The interventions of social workers at all levels with individuals, families, groups, organizations, and communities (micro, mezzo, and macro) are required in the practice and evaluation of PN for the elimination of healthcare barriers and disparities in Nigeria (Ebue, Uche and Agha, 2017).

The principles and goals of PN are in line with the tenets of the social work profession, hence, social workers as patient navigators promote the efficiency and effectiveness of PN intervention. Social work engagement is with the most vulnerable, deprived and marginalized within the spectrum of the healthcare continuum, and social work interventions begin at the point where coping with life conditions becomes difficult for the people and when there are clear manifestations of dysfunctions in the society. Social work as a profession recognized that interconnected historical, socio-economic, cultural, spatial, political, and personal factors serve as opportunities and/or barriers to human wellbeing and development, hence, social workers stand against all forms of inequality, discrimination, exploitation, and oppression. Social work and healthcare delivery in Nigeria can be reflected in the expanded scope of the global mandate of the profession (IFSW, 2014; Okoye, 2019). Chronic illness of any kind is capable of stripping the sufferers of every sense of hope and self-worth, and as such the patient requires the best of care to mitigate the negative impact of such illness. This is because, in situations where such care is constrained for one reason or the other, life can become a punishment and miserable.

Conclusion

The situations that gave rise to the development and integration of patient navigation into the healthcare systems of the United States of America in the '90s are very much evident in Nigeria, even more, precarious is the condition of health-seeking pathways in Nigeria. While social work as a profession was instrumental in the success PN recorded in all the countries that adopted it, the situation in Nigeria appears rather uncertain especially as the law for the professionalization of social work in the country is yet to be established. Despite the constitutional and legal constraints bedeviling social work practice in Nigeria, the profession portends hope for the country. The health and humanitarian challenges facing the country seem endemic as it keeps taking new dimensions every day. The doggedness and resoluteness of the Nigerian Association of Social Workers have proven to be the elixir the Nigerian psychosocial and welfare challenges need to be nipped in the bud as many social workers are emerging every year from the universities. Interventions like patient navigation will not only improve access to healthcare services in Nigeria but also create a platform for professional training and employment opportunities.

In view of the potentials PN has in quality healthcare delivery, we, therefore, recommend the adoption and integration of the intervention as one of the healthcare delivery safety nets in Nigeria. If utilized and expanded, PN promises to be a functional platform for timely access to chronic healthcare services by the people, especially the vulnerable group, the poor, and hard-to-reach communities. We also recommend the streamlining of PN into social work training, thereby familiarizing social workers at all levels with PN processes, empowering them for eventual roles as patient navigators. Meeting the maximum target expected of the Nigerian health system requires flexibility and decentralization of services. This will as well create an avenue for job creation opportunities like new job roles of patient navigators deployed across primary health centres and other levels of health services in Nigeria. This will boost professional communication among multiple healthcare providers in a multidisciplinary team approach.

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