

The surgical waiting time initiative: A review of the Nigerian situation

Imran Haruna Abdulkareem

Department of Trauma and Orthopaedic Surgery, Leeds University Teaching Hospitals, Leeds, West Yorkshire, United Kingdom

SUMMARY

The concept of surgical waiting time initiative (SWAT) was introduced in developed countries to reduce elective surgery waiting lists and increase efficiency of care. It was supplemented by increasing popularity of day surgery, which shortens elective waiting lists and minimises cancellations. It is established in Western countries, but not in developing countries like Nigeria where it is still evolving. A search was carried out in Pub Med, Google, African journals online (AJOL), Athens and Ovid for relevant publications on elective surgery waiting list in Nigeria, published in English language. Words include waiting/wait time, waiting time initiative, time to surgery, waiting for operations, waiting for intervention, waiting for procedures and time before surgery in Nigeria. A total of 37 articles published from Nigeria in relation to various waiting times were found from the search and fulfilled the inclusion criteria. Among them, 11 publications (29.7%) were related to emergency surgery waiting times, 10 (27%) were related to clinic waiting times, 9 (24.3%) were related to day case surgery, 2 (5.5%) were related to investigation waiting times and only 5 (13.5%) articles were specifically published on elective surgery waiting times. A total of 9 articles (24.5%) were published from obstetrics and gynaecology (OG), 7 (19%) from general surgery, 5 (13.5%) from public health, 3 (8%) from orthopaedics, 3 (8%) from general practice (GP), 3 (8%) from paediatrics/paediatric surgery, 2 (5.5%) from ophthalmology, 1 (2.7%) from ear, nose and throat (ENT), 1 (2.7%) from plastic surgery, 1 (2.7%) from urology and only 1 (2.7%) article was published from dental/maxillofacial surgery. Waiting times mean different things to different health practitioners in Nigeria. There were only 5/37 articles (13.5%) specifically related to elective surgery waiting times in Nigerian hospitals, which show that the concept of the SWAT is still evolving in Nigeria. Of the 37, 11 (24.5%) publications were from obstetrics and gynaecology (O & G) alone, but these were mostly related to emergency antenatal care rather than surgery. Therefore, more research and initiative needs to be undertaken from all the surgical sub-specialties in order to disseminate this concept of SWAT towards early diagnosis and treatment of elective life-threatening conditions, as well as effective patient care. Adopting this concept will help healthcare managers and policy makers to stream line and ring face resources to cater for non-urgent or semi-urgent cases presenting to our hospitals in Nigeria.

Key words: Cancellations, day surgery, elective surgery, ring-fencing, SWAT, waiting list, waiting time

Address for correspondence:

Dr. Imran Haruna Abdulkareem,
Department of Trauma and
Orthopaedic Surgery,
B Floor Clarendon Wing,
Leeds General Infirmary,
Great George Street,
Leeds-LS1 3EX,
West Yorkshire, UK.
E-mail: imranharuna@yahoo.com

INTRODUCTION

Waiting times mean different things to different medical practitioners in Nigeria. However, this is a review of the surgical waiting times, as currently understood and

practised in Nigeria by different health professionals. The surgical waiting time initiative (SWAT) was introduced in the UK and other developed countries, in order to reduce waiting lists and increase efficiency of patient care (Frankel, 1989).¹ It was later supplemented by increasing popularity of day surgery, which shortens elective waiting lists and minimises cancellations. SWAT is now well established in Western countries like UK (Mills *et al.*, 1991),² USA and Canada (Casas *et al.*, 2007)³ where it is practised alongside day surgery; but not in developing countries like Nigeria where this concept is still new and evolving. So far, most of the centres in Nigeria do not have a ring-fenced or dedicated elective surgery service and most of these cases are admitted to the same wards with emergency patients,

Access this article online	
Quick Response Code:	Website: www.nigeriamedj.com
	DOI: 10.4103/0300-1652.144692

with no dedicated theatre time or space. This leads to frequent cancellations of the elective cases as they are perceived to be less urgent than emergencies, and so the patients end up suffering while their diseases may continue to progress or deteriorate, especially cancers.

In 2000, the UK department of Health (DoH) set up a mandatory target for urgent referral and management of patients with suspected bowel cancer. They recommended that all patients referred from their general practitioners must be reviewed by a specialist within 2 weeks and must be offered treatment within 62 days (Mukherjee *et al.*, 2010).⁴ This initiative has since been extended and rolled out to include other cancers and public health issues of interest in the UK (Lewis *et al.*, 2005).⁵ In June 2004, the UK National Health Service (NHS) introduced the 18 week patient pathway, which guaranteed that no patient should wait for more than eighteen weeks before any planned (elective) surgery in the UK (Bruni *et al.*, 2010).⁶ This has resulted in a significant improvement in the early diagnosis and treatment of patients referred from their general practitioners (GPs), especially in the fields of oncology, orthopaedics, general surgery, rheumatology and cardiology, among others.¹⁻⁶

MATERIALS AND METHODS

A search was carried out in PubMed, Google, AJOL, Athens and Ovid for relevant publications on surgical waiting times in Nigeria. The search included all articles published within and outside Nigeria related to the topic in question, and also restricted to articles published in English language only. The types of articles considered include both prospective and retrospective case series, case reports, review articles, literature reviews, reports, guidelines, published reviews and commentaries. Search words used include waiting/wait time, waiting time initiative, time to surgery, waiting for operations, waiting for intervention, waiting for procedures and time before surgery in Nigeria.

RESULTS

A total of 37 articles published from Nigeria in relation to various waiting times were found from the search and fulfilled the inclusion criteria.⁷⁻⁴³ A total of 11 publications (29.7%) were related to emergency surgery waiting times,⁷⁻¹⁷ 10 (27%) were related to clinic waiting times,³²⁻⁴¹ 9 (24.3%) were related to day case surgery,²³⁻³¹ 2 (5.5%) were related to investigation waiting times^{42,43} and only 5 (13.5%) articles were specifically published on elective surgery waiting times.¹⁸⁻²² A total of 9 articles (24.5%) were published from obstetrics and gynaecology (OG), 7 (19%) from general surgery, 5 (13.5%) from public health, 3 (8%) from orthopaedics, 3 (8%) from general practice (GP), 3 (8%) from paediatrics/paediatric surgery, 2 (5.5%) from ophthalmology, 1 (2.7%) from ENT, 1 (2.7%) from plastic

surgery, 1 (2.7%) from urology and only 1 (2.7%) article was published from dental/maxillofacial surgery. These results are illustrated in Tables 1-7.

DISCUSSION

A review of the published articles on waiting times in Nigeria showed that 11/37 (29.7%) of the publications focused on emergency surgery/care [Tables 1 and 3].⁷⁻¹⁷ This is not surprising, because there is currently a lot of focus on emergency care and surgery in many health centres in Nigeria. This may be a result of delayed presentation by patients, inadequate funding of the hospitals, lack of dedicated elective surgery services, lack of awareness among patients with non-urgent medical conditions and the general negative attitudes of the healthcare practitioners and managers towards non-urgent (elective) surgery. A total of 10/37 (27%) of the publications were focused on clinic waiting times [Tables 1 and 6],¹⁸⁻²² which is a reflection of the growing public health interest on measures of patient satisfaction with healthcare services. This is a good development as these outcomes can be used to improve the overall standard of healthcare facilities in Nigeria.

Furthermore, 9/37 (24.3%) of the publications were related to day surgery practice in Nigeria;²³⁻³¹ and most of the authors highlighted the increasing role of day surgery in facilitating and even ring-fencing elective surgeries in order to prevent or reduce frequent cancellations in favour

Table 1: Summary of intervention types in relation to waiting time

Type of intervention	Emergency surgery/care	Elective surgery	Day surgery	Clinic attendance	Investigations waiting times	Total
Number of articles	11	5	9	10	2	37
Percentage	29.7	13.5	24.3	27	5.5	100

Table 2: Summary of specialties in relation to waiting times

Specialty	Number of published articles	Percentage
Anaesthesia	1	2.7
General surgery	7	19
Orthopaedics	3	8
Obstetrics and gynaecology	9	24.5
Plastic surgery	1	2.7
Paediatric surgery	3	8
Public health	5	13.5
GP/Family medicine	3	8
Ophthalmology	2	5.5
ENT	1	2.7
Dental/maxillofacial surgery	1	2.7
Urology	1	2.7
Total	37	100

Table 3: Summary of articles focusing on emergency surgery/care

Study	Centre	Focus	Specialty	Findings	Conclusion
Aderonmu et al., 2006 ⁷	Ladoke Akintola University Teaching Hospital, Osogbo, Osun State	Emergency surgery	OG and General surgery	2070 operations were performed within the period of study. 72.6 were done as emergency. OG cases were 66.6% while 33.4% waiting time, mean of which was 39.5+/-2.7 h, was unduly prolonged. Mortality was 10.3%.	The high morbidity and mortality as reflected in this study could be reduced through prompt surgical interventions, education, among other things.
Adamu et al., 2010 ⁸	Ahmadu Bello University Teaching Hospital, Zaria, Nigeria	Emergency surgery	General surgery	There were 488 patients, mean age 32 +/-1.7 SD years. TT ranged between 0.8 and 79.0 h, mean 22.3 +/-10.0 h. In 81.6% operative intervention was delayed beyond 6h of which financial constraints accounted for 53.8%. Patients whose operations were delayed beyond 24 h had a longer hospital stay.	Emergency abdominal operations were delayed in our patients mainly because of scarce financial resources. Delayed interventions were associated with higher morbidity and mortality.
Oiji et al., 2002 ⁹	Obafemi Awolowo University Teaching Hospital, Ife	Emergency surgery	OG	The decision-surgical intervention interval ranged from 30 min to 4.5 h. The major reason for delay was unavailability of compatible blood (88.2%), followed by lack of electricity (4.9%), unsterile instruments (3.9%), waiting for ambulance (2.9%), delay in arrival of anaesthetist (1.9%) and neonatologists (1.9%).	The maternal and perinatal outcome in uterine rupture would be improved by early diagnosis and avoidance of pre-operative delay through availability of essential obstetric services.
Anonymous, 1995 ¹⁰	Situation analysis of research projects in west Africa	Emergency care	OG	Situation analyses were conducted by 11 multidisciplinary teams in the west African Prevention of Maternal Mortality (PMM) Network, with technical assistance from Columbia University's Center for Population and Family Health	These situation analyses were useful for assessing health system factors contributing to maternal deaths. The information on complicated cases and on hospital functioning provided a marked improvement over previous studies limited to data on deliveries and maternal deaths. Low-cost techniques such as the patient-flow studies and drug and supply inventories provided valuable information, which was easily intelligible to program planners. These types of studies are recommended for use prior to the development of projects designed to reduce maternal deaths
Anonymous, 1991 ¹¹	Situation analysis of research projects in west Africa	Emergency care	OG	Many maternal deaths in developing countries occur because mothers with complicated pregnancies or deliveries cannot be transported at all or fast enough to a health facility.	High technology transport is not cost effective and should not be part of a primary healthcare system.
Ariba et al., 2007 ¹²	Olabisi Onabanjo University Teaching Hospital, Sagamu	Emergency care	General medical practice	The mean duration of stay at A and E was 2.4 days. Although 91% of the respondents regarded available equipments as very adequate, 38.8% perceived the overall quality of care as sub-optimal. Many of the patients were displeased with their interactions with care providers. They longed for urgent improvement in waiting times, among others.	To improve patient's satisfaction with emergency care, greater emphasis needs to be placed on enhancing the interpersonal relationships between health workers and patients.
1994 ¹³	Network (focus on Africa)	Emergency care	OG	Barriers to care are physical, cultural, technical and economic. Cost or distance from home may prevent women from seeking care. Infection, haemorrhage and uterine injury are frequently related to unsafe abortions, particularly among teenage women.	Time, money and women's place in society determine whether a woman receives care. Women with knowledge of complications may not have available services. Cost of care may discourage or delay decisions. Governments must support maternal health policies.
Adeyemi et al., 1982 ¹⁴	Lagos University Teaching Hospital, Lagos	Emergency surgery	Paediatric surgery	60 cases of imperforate anus were treated. Some of the problems related to the outcome of treatment are late presentation, inadequate facilities and shortage of specialised personnel.	We suggest an urgent colostomy performed under local anaesthesia as a safe and expedient treatment for babies with obstruction and in whom the presence of a trans-levator anomaly cannot be immediately verified.
Waalidijk, 2004 ¹⁵	Babbar Ruga Fistula Centre, Katsina	Emergency surgery	OG	A total of 1716 patients with fistula duration of 3-75 days after delivery were treated immediately on presentation by catheter and/or early closure.	This immediate management proves highly effective in terms of closure and continence and will prevent the patient from becoming an outcast with progressive downgrading medically, socially and mentally.
Agbo et al., 2012 ¹⁶	Usman Danfodiyo University Teaching Hospital, Sokoto	Emergency surgery	General surgery	A retrospective review of case notes of patients with emergency surgical conditions, including management and outcomes.	Acute appendicitis and intestinal obstruction are the most common conditions encountered.
Mbah et al., 2006 ¹⁷	Usman Danfodiyo University Teaching Hospital, Sokoto	Emergency surgery	General surgery	Only 13 (9.6%) of the patients were operated within 6 h of hospital admission. Operations after 6 h in 123 of them was due to several reasons but the most common reason (65.4%) was financial constraint.	The adverse consequences of prolonged waiting time among patients with acute abdomen are most commonly due to financial difficulties. A hospital-based credit scheme available to emergency patients will rapidly improve the quality of care.

Table 4: Summary of articles focusing on elective surgery waiting times

Study	Centre	Focus	Specialty	Findings	Conclusion
Rabiu <i>et al.</i> , 2008 ²⁸	National Eye Centre, Kaduna	Elective surgery	Ophthalmology	The major barriers to services were 'old age and no need for surgery' (29.6%), 'cannot afford operation' (16.9%), 'waiting for cataract surgery' (12.7%).	Despite the recently introduced free cataract surgical services the prevalence of operable cataract is high. Accessibility of existing services needs to be improved and other barriers should be overcome by appropriate health education on cataract services.
Tahzib, 1989 ¹⁹	Usman Danfodiyo University Teaching Hospital, Sokoto	Elective surgery	OG	As many as 300 women suffering from VVF come to gynaecology clinics for treatment every month in some areas of northern Nigeria. But many doctors do not wish to deal with VVF and their Western training does not equip them to perform needed surgery.	A WHO working group on VVF recently recommended urgent measures to prevent the disorder and to clear the backlog of patients waiting for operations.
Missauno <i>et al.</i> , 2012 ²⁰	Jos University Teaching Hospital, Jos	Laparoscopic surgery (elective)	Paediatric surgery	This was a prospective analysis of all consecutive children that had laparoscopic surgery at 5 hospitals in northern Nigeria from June 2008 to February 2011	We solicit a paradigm shift in our approach to surgical management and implore other centres to embrace laparoscopic surgery in the management of surgical conditions in children since it confers obvious advantages over open surgery.
Akinyola <i>et al.</i> , 2008 ²¹	Obafemi Awolowo University Teaching Hospital, Ife	Elective surgery	Orthopaedics	146 children who had elective operations on 210 limbs were reviewed. Their mean age was 75.6 ± 66.8 months (range 0.3-396 months). The most common indications for surgery were angular knee deformities and club foot. The mean hospital stay before surgery was 12 ± 8.8 days (range 1-38 days).	Most of the factors that predicted poor outcome in this study were patient and environment-related and are preventable. There is need to upgrade facilities in health institutions in Nigeria.
Kolawole <i>et al.</i> , 2002 ²²	University of Ilorin Teaching Hospital, Ilorin	Elective surgery	Anaesthesia	The highest incidence of cancellation was in orthopaedics (11.06%), with cardiothoracic having the lowest (1.84%). The most common reason for cancellation is time constraint.	Most of the causes of this high cancellation rates are preventable. Careful planning and proper communication between surgeons and patients, as well as among the medical team, will help to achieve this.

of emergency cases [Tables 1 and 5],²³⁻³¹ and 2/37 (5.5%) of the published articles were related to investigation waiting times [Tables 1 and 7]. However, none of these articles specifically focused on elective or planned surgical waiting times as well as the need for an organised initiative to improve the waiting times for non-urgent surgical intervention in Nigeria.

In contrast, only 5/37 (13.5%) of the relevant published articles were specifically related to elective surgery waiting times [Tables 1 and 4]; and most of these articles are non-randomised retrospective case series in single centres; only one study was a prospective review of laparoscopic procedures in paediatric patients (Misauno *et al.*, 2012). Also, one of the five publications related to elective surgery reviewed the effects of cancellations on the surgical waiting list, and the authors recommended adequate planning and good communication between staff and patients as the key to avoiding frequent cancellations of surgical lists (Kolawole *et al.*, 2002). One of the

articles was a review of day surgery practice in Nigeria, and explained the ideal concepts of this idea, as well as its role in carrying out elective surgeries in order to reduce the surgical waiting times (Abdulkareem, 2011).

With regards to specific sub-specialties, 9/37 (24.5%) of the publications were from OG, but a few of these publications related to emergency antenatal care rather than emergency surgery; 7/37 (19%) were related to waiting times in general surgery, which is the most established surgical sub-specialty in Nigeria, 5/37 (13.5%) of the publications were related to public health, which reflects the increasing effort of physicians in getting patient feedback regarding their satisfaction with healthcare services in Nigeria, whereas orthopaedics, paediatric surgery and family medicine each had 3/37 (8%) of the publications related to various types of waiting times, ophthalmology had 2/37 (5.5%) of the published articles, while anaesthesia, plastic surgery, ENT,

Table 5: Summary of articles focusing on day surgery

Study	Centre	Focus	Specialty	Findings	Conclusion
Dunmade <i>et al.</i> , 2009 ²³	University of Ilorin Teaching Hospital, Ilorin, Kwara State	Day case surgery	ENT	28 patients operated for adenoidectomy. 16 children as planned day cases and 12 as inpatients. 50% of the patients were between 2 and 4 years.	Day case adenoidectomy is relatively safe and may prove advantageous considering long surgical waiting lists; preventing hospital-acquired infection and minimising cost of hospitalisation.
Abdur-Rahman <i>et al.</i> , 2009 ²⁴	University of Ilorin Teaching Hospital, Ilorin	Day case surgery	Paediatric/ general surgery	Of the 660 elective cases, 449 (68.02%) children were recruited as day cases. The average number of outpatient clinic visits before surgery was 2-3 visits (41.2%) with mean interval to surgery of 4-5 weeks (60.3%). Logistics (investigations and availability of operation list) and patient's fitness for surgery were statistically significant delay factors ($P = 0.001$).	There is a need for a day care centre to reduce waiting list at UITH.
Abdulkareem, 2011 ²⁵	Leeds University Teaching Hospital	Day case surgery	Surgery in general		Day case surgery of elective cases can be used to reduce the waiting list.
Legbo <i>et al.</i> , 2005 ²⁶	Usman Danfodiyo University Teaching Hospital, Sokoto	Day case surgery	Plastic surgery		Day case surgery is an effective and easy way of managing many plastic surgical conditions.
Onwuanyi <i>et al.</i> , 1997 ²⁷	University of Benin Teaching Hospital, Benin	Day case surgery	Orthopaedics	15 patients undergoing extraction of Kuntscher nails under local anaesthesia indicated varying behavioural responses and tolerance of the procedure. Financial considerations are assuming a greater importance, since planned procedures for metal implants removal contribute considerably to the waiting lists for elective surgery.	The compliance rate among our patients has been on the increase, as this method offers shorter waiting period, immediate ambulation, is a day procedure, early return to work and lower monetary costs.
Onwuanyi <i>et al.</i> , 1996 ²⁸	University of Benin Teaching Hospital, Benin	Day case surgery	Orthopaedics	15 patients undergoing extraction of Kuntscher nails under local anaesthesia indicated varying behavioural responses and tolerance of the procedure. Financial considerations are assuming a greater importance, since planned procedures for metal implants removal contribute considerably to the waiting lists for elective surgery.	The compliance rate among our patients has been on the increase, as this method offers shorter waiting period, immediate ambulation, is a day procedure, early return to work and lower monetary costs.
Ekwempu, 1990 ²⁹	Ahmadu Bello University Teaching Hospital, Zaria	Day case surgery	OG	375 cases were recorded; there were 272 endometrial biopsies, 89 non-septic abortions, 10 missed abortions and 4 septic abortions.	MVA using the Karman cannula and syringe is effective, safe, reliable, convenient and economical for use in an outpatient setting. In addition, this procedure reduced the waiting list for dilation and curettage procedures.
Agbakwuru <i>et al.</i> , 2001 ³⁰	Obafemi Awolowo University Teaching Hospital, Ife	Day case surgery	General surgery	Patients were operated as day cases using general or local anaesthesia, with reasonable results.	The patients accepted and approved of day surgery and practitioners were encouraged to accept this concept.
Dakum <i>et al.</i> , 2006 ³¹	Jos University Teaching Hospital, Jos	Day case surgery	Urology	There was a cancellation rate of 15.6% ($n = 42$) mainly due to the inability of the patients to come (24 patients, 57.1%), inadequate materials in the theatre (9 patients, 21.4%), power failure (4 patients, 9.5%), strike action (3 patients, 7.1%) and financial difficulties (2 patients, 4.8%).	The high cancellation rate of urologic day cases and are mainly due to avoidable reasons. Patient and surgeon education as well as infrastructural development are recommended to reduce these; so as to gain maximally from urologic day surgery practice.

dental surgery and urology each had 1/37 (2.7%) of the relevant publications. These results are illustrated in Table 2.

A review of the current literature elsewhere showed that management of elective surgical waiting times has

become well established in the healthcare systems of many developed countries such as UK, USA, Australia and Canada. This is especially true in the fields of cancer, joint replacement surgeries (arthroplasties), sight restoration, cardiac problems and diagnostic imaging among others

Table 6: Summary of articles focusing on clinic waiting times

Study	Centre	Focus	Specialty	Findings	Conclusion
Ilyasu <i>et al.</i> , 2010 ³²	Aminu Kano Teaching Hospital, Kano Nigeria	Clinic waiting time	Community medicine	Overall, 83% of patients were satisfied with services received, while 17% were dissatisfied. 88%, 88%, 87% and 84% of the patients were satisfied with patient provider relationship, in-patient services, hospital facilities and access to care, respectively. 30% and 27% were dissatisfied with waiting time and cost of treatment, respectively.	Health workers need to consider patients as customers by being friendly and reducing waiting times for consultation and investigations.
Esimai <i>et al.</i> , 2009 ³³	Obafemi Awolowo University Teaching Hospital, Ife	Clinic waiting time	OG	The total time spent in the clinic was 2 h 42 min of which 1 h 40 min was spent at the nurse's desk, 13 min for consultation with the doctor and the rest for laboratory and record services. The transit time before consultation with nurses and doctors were 51.2 min and 2 h 29 min, respectively.	Majority of respondents were satisfied with the care received, however, long waiting time is the norm of antenatal care services.
Bamise <i>et al.</i> , 2008 ³⁴	Obafemi Awolowo University Teaching Hospital, Ife	Clinic waiting time	Dental services	Anticipation of painful dental treatment, high dental charges, long waiting times and being too busy for a dental visit were cited as the most important impediments to seeking dental treatment. Females expressed greater satisfaction with the services.	Dental service utilisation among the students was found to be low. Oral health awareness campaigns, improving the quality of the services and shortening the waiting time are expected to increase service utilisation and satisfaction.
Ajayi <i>et al.</i> , 2005 ³⁵	University College Hospital, Ibadan	Clinic waiting time	General medical practice	407 adult patients selected by systematic sampling technique were interviewed, 10 focus group discussion sessions (FGD) were held and observations were made at the record clerks' desk, nurses' desk and waiting hall. Also, 35 consultations were observed.	The study provided valuable information to assist in improving the quality of care at the clinic; specifically, the long waiting time, attitude of the record clerks, the dearth of basic amenities, deficient patient-doctor communication skills and health promotion services.
Uzochukwu <i>et al.</i> , 2005 ³⁶	College of Medicine, University of Nigeria, Nsukka	Clinic waiting time	Public health	Patients showed wide spread dissatisfaction with fees charged, waiting time before being seen and treatment instructions given to them.	The governments need to explore incentives such as working conditions and monetary benefits to motivate health workers and improve their performance so as to serve the patients better.
Ademola <i>et al.</i> , 2005 ³⁷	University of Ilorin Teaching Hospital, Ilorin	Clinic waiting time	Ophthalmology	A total of 124 respondents were interviewed. Majority (89.4%) reported long waiting times particularly for doctors' consultation. Missed clinic appointment was mostly due to health workers strike. Two-thirds of patients procured their prescribed drugs outside the hospital due to hospital bureaucracy.	There is need to frequently examine the quality of healthcare received by patients in developing countries with the aim of identifying areas of services that should be improved.
Ehiri <i>et al.</i> , 2005 ³⁸	Primary Health Centre, Calabar	Clinic waiting time	Public health	Results of the focus group discussions with mothers showed that a few perceived quality of care to be poor. The main concerns were long waiting time, lack of essential drugs and attitude of the health workers.	Efforts to improve the quality of child health services should focus not only on resource-intensive structural improvements, but also on cheap, cost-effective measures that address actual delivery of services (process), especially the proper use of national guidelines for case management and meaningful supervision.
Ajayi 2002 ³⁹	University College Hospital, Ibadan	Clinic waiting time	General medical practice	A sample of 315 subjects attending the clinic over a period of 3 months was interviewed. The 3 most common activities patients engaged in during waiting time were watching of happenings in the clinic, reading and chatting. However, the most desired activity during waiting period was health education on specific diseases.	The provision of health education on specific health issues constitutes an acceptable and useful way of utilising waiting time in the outpatient clinic. This may further improve the health education services provided at such a clinic.
Alakija, 1988 ⁴⁰	College of Medical Sciences, University of Benin	Clinic waiting time	Public health	More use was made of medical centres than hospital out-patient departments and general practice clinics and this was attributed to the easy accessibility of the medical centres.	The time spent in waiting to see the health providers was also important and accounted for more use of the medical centres.
Bamisiaye <i>et al.</i> , 1986 ⁴¹	Lagos University Teaching Hospital	Clinic waiting time	Public health	Waiting time and its impact on service acceptability and coverage at an MCH clinic in Lagos, Nigeria.	

Table 7: Summary of articles focusing on investigation waiting time

Study	Centre	Focus	Speciality	Findings	Conclusion
Gukas <i>et al.</i> , 2000 ⁴²	Jos University Teaching Hospital, Jos, Plateau State	Pre-operative diagnosis	General surgery	Tru-cut biopsy achieved a sensitivity of 88.9% (95% CI 79.7-98.1) specificity of 96.8% (95% CI 92.5-100) and an overall diagnostic accuracy of 93.5% (95% CI 88.9-98.2). There was a false positive rate of 4.8%, a false negative rate of 7.6% and a positive predictive value of 95.2%. The pathologist was able to make a correct specific histological diagnosis in 76.2% of all the adequate Tru-cut samples.	If Tru-cut biopsy is done instead of excision biopsy, it will sufficiently reduce waiting time and reduce cost (4-fold). It is well tolerated by patients. We regard the procedure as a useful adjunct and indeed a practical option for accurate pre-operative diagnosis of palpable breast lesions.
Olasinde <i>et al.</i> , 1993 ⁴³	University Clinic for Radiology and Radiotherapy, Wien, Austria	Pre-operative investigations	General surgery	405 patients with primary breast carcinoma were analysed. There was complete response in 64.2% after surgery and radiotherapy. This is a better result compared with developing countries, like Nigeria where > 90% of cancer patients report late before treatment, and inadequate radiotherapy facilities lead to long waiting list.	A tumour regression rate (complete and partial) of 98.3% was obtained. This work has shown that most women with breast cancer could be cured when the lesions are detected very early and sizes smaller.

(Bruni *et al.*, 2007).⁴⁴ Briggs *et al.*, (2011)⁴⁵ reviewed the effect of active management of surgical waiting lists in a urological service in Australia, which resulted in a significant reduction in the surgical waiting times for semi-urgent and non-urgent patients from 248-180 days in the 10-month period of the review. Other workers (Mills *et al.*, 2005)⁴⁶ also revealed a significant reduction in the surgical waiting times of their patients as a result of the waiting time initiative in an ENT surgical unit.

Gray *et al.*, (2010)⁴⁷ also investigated the effects of reducing the pre-operative waiting times in patients undergoing spinal surgery, and revealed that this reduction in waiting times did not compromise the patient's quality of care, but rather had a positive influence on the patients due to the added convenience. In another study of patients suspected to have colorectal cancer, Mukherjee *et al.*,⁴ observed that the 2-week referral pathway reduces both diagnostic and treatment waiting times for these patients, and led to an improved rate of early diagnosis of colorectal cancer in their cohort of patients.

In a systematic review of the effect of prolonged surgical waiting times for patients with renal cancers, Jewett *et al.*, (2006)⁴⁸ revealed that waiting times ranged from 26 to 82 days, with a median of 64 days from referral to surgery in one Canadian study. This was found to have exceeded the National and International guidelines, which recommended 2-4 weeks for all cancer surgeries. However, they observed that there were no studies looking at the association between surgical delays and clinical outcomes in cancer patients. In another Canadian study, however, Fradet *et al.*, (2006)⁴⁹ did a systematic review of 18 published articles evaluating waiting times for bladder cancer surgery, 10 of which evaluated the effects of prolonged waiting times and overall survival or tumour grade. Three of these studies measured the association between a delay of 3 months and

the tumour grade, and found a positive correlation between prolonged delay and tumour grade.

Aiono *et al.*, (2000)⁵⁰ prospectively reviewed the waiting list of a general surgical unit over a 13-year period. They found that surgeons had no control on the length of the surgical waiting lists in spite of the introduction of the SWAT. They revealed that funding, lack of beds and theatre sessions were the main factors influencing the length of the surgical waiting times, and emphasised that an imbalance between these factors will lead to insufficient beds being available to cater for the theatre sessions created leading to frequent cancellations.

In most Western countries like the UK, for example as a result of this ring-fencing system, which ensures that all elective cases are properly pre-booked and carried out on dedicated theatre lists and at specified times, there is hardly any cancellation of elective surgical cases without a definite clinical reason; and when this happens, the erring departments or hospital trusts are fined by the supervising agencies (personal experience). This system will ensure that, elective surgical cases are adequately catered for and patients do not therefore suffer from the consequences of any delays in intervention. In view of this, healthcare managers and policy makers in Nigeria can adopt a similar system to ring-fence all elective surgical cases, and ensure that these procedures are carried out within a specific time frame to improve the quality of care to patients. However, these measures require adequate planning, funding, staff training and patients' co-operation.

CONCLUSION

Waiting times mean different things to different health practitioners in Nigeria. There were only 5/37 articles (13.5%) specifically related to elective surgery waiting

times in Nigerian hospitals, which show that the concept of the SWAT is still evolving in Nigeria. A total of 11/37 (24.5%) of the publications were from OG alone, but these were mostly related to emergency antenatal care rather than surgery. Therefore, more research and initiative needs to be undertaken from all the surgical sub-specialties in order to disseminate this concept of SWAT towards early diagnosis and treatment of elective life-threatening conditions, as well as effective patient care. Adopting this concept will help healthcare managers and policy makers to stream line and ring face resources to cater for non-urgent or semi-urgent cases presenting to our hospitals in Nigeria.

REFERENCES

- Frankel S. The natural history of waiting lists — some wider explanations for an unnecessary problem. *Health Trends*. 1989 May; 21(2):56–58.
- Mills RP, Heaton JM. Waiting list initiatives: Crisis management or targeting of resources? *J R Soc Med* 1991;84:405-7.
- Casas MJ, Kenny DJ, Barrett EJ, Brown L. Prioritization for elective dental treatment under general anesthesia. *J Can Dent Assoc*. 2007 May;73(4):321.
- Mukherjee S, Fountain G, Stalker M, Williams J, Porrett TR, Lunniss PJ. Homerton Hospital Colorectal Cancer Multidisciplinary Team. The 'straight to test' initiative reduces both diagnostic and treatment waiting times for colorectal cancer: Outcomes after 2 years. *Colorectal Dis* 2010;12:e250-4.
- Lewis NR, Le Jeune I, Baldwin DR. Under utilisation of the 2-week wait initiative for lung cancer by primary care and its effect on the urgent referral pathway. *Br J Cancer*. 2005 Oct 17;93(8):905-8.
- Bruni RA, Laupacis A, Levinson W, Martin DK. Public views on a wait time management initiative: A matter of communication. *BMC Health Serv Res* 2010;10:228.
- Aderounmu AO, Adeoti ML, Oguntola AS, Oboro VO, Fadiora SO, Akanbi OO, *et al*. Pattern and outcome of emergency surgery in a new Nigerian teaching hospital—The LAUTECH Osogbo experience. *Niger Postgrad Med J* 2006;13:172-5.
- Adamu A, Maigatari M, Lawal K, Iliyasu M. Waiting time for emergency abdominal surgery in Zaria, Nigeria. *Afr Health Sci* 2010;10:46-53.
- Orji EO, Fasubaa OB, Onwudiegwu U, Dare FO, Ogunniyi SO. Decision-intervention interval in ruptured uteri in Ile-Ife, Nigeria. *East Afr Med J* 2002;79:496-8.
- Anonymous. Situation analyses of emergency obstetric care: Examples from eleven operations research projects in west Africa. The prevention of maternal mortality network. *Soc Sci Med* 1995;40:657-67.
- Anonymous. Reaching help on time in an emergency delivery. *Safe Mother* 1991:5-7.
- Ariba AJ, Thanni LO, Adebayo EO. Patients' perception of quality of emergency care in a Nigerian teaching hospital: The influence of patient-provider interactions. *Niger Postgrad Med J* 2007;14:296-301.
- Blaney CL. Access to care save lives. *Netw Res Triangle Park N C* 1994;14:12-5.
- Adeyemi SD, de Rocha-Afodu JT. Management of imperforate anus at the Lagos University teaching hospital, Nigeria: A review of ten years' experience. *Prog Pediatr Surg* 1982;15:187-94.
- Waalwijk K. The immediate management of fresh obstetric fistulas. *Am J Obstet Gynecol* 2004;191:795-9.
- Agbo SP, Oboirien M, Ismail S. Pattern of Surgical abdominal emergencies in Sokoto, Nigeria. *Jos J Med* 2012;6:22-5.
- Mbah N, Opara WE, Agwu NP. Waiting time among acute abdominal emergencies in a Nigerian teaching hospital: Causes of delay and consequences. *Niger J Surg Res* 2006;8:69-73.
- Rabiu MM, Muhammed N. Rapid assessment of cataract surgical services in Birnin-Kebbi local government area of Kebbi State, Nigeria. *Ophthalmic Epidemiol* 2008;15:359-65.
- Tahzib F. An Initiative on vesico-vaginal fistula. *Lancet* 1989;1:1316-7.
- Misauno MA, Ojo EO, Uba AF. Laparoscopic paediatric surgery: A potential for paradigm shift in developing countries. *Afr J Paediatr Surg* 2012;9:140-2.
- Akinyoola AL, Adegbehingbe OO, Ogundele OJ. Factors influencing the outcome of elective paediatric orthopaedic operations in Ile-Ife, Nigeria. *Tanzan J Health Res* 2008;10:68-72.
- Kolawole IK, Bolaji BO. Surgery and Anaesthesia: Reasons for cancellations of elective surgery in Ilorin. *Niger J Surg Res* 2002;28:33.
- Dunmade AD, Alabi BS. Day case adenoidectomy: Is it safe? *Niger J Clin Pract* 2009;12:145-8.
- Abdur-Rahman LO, Kolawole IK, Adeniran JO, Nasir AA, Taiwo JO, Odi T. Pediatric Day case surgery: Experience from a tertiary health institution from Nigeria. *Ann Afr Med* 2009;8:163-7.
- Abdulkareem IH. Day case surgery in Nigeria. *Niger J Clin Pract* 2011;14:383-9.
- Legbo JN, Opara WE. Day-care plastic surgery in Nigeria: Coping with limited resources. *Ann Afr Med* 2005;4:14-8.
- Onwuanyi ON, Omotosho KA, Habeeb KA. Extraction of Kuntscher (femoral) implant under local anaesthesia: An appraisal of patients tolerance and merits. *J Pak Med Assoc* 1997;47:153-5.
- Onwuanyi ON, Omotosho HA, Habeeb KA. Removal of femoral Kuntscher nails in selected cases under local anaesthesia. *East Afr Med J* 1996;73:835-7.
- Ekwempu CC. Uterine aspiration using the Karman cannula and syringe. *Trop J Obstet Gynaecol* 1990;8:37-8.
- Agbkwuru EA, Faponle AF, Adesukanmi AR, Ogundoyin O. Practice and acceptance of day-care surgery in a semi-urban Nigerian hospital. *East Afr Med J* 2001;78:170-3.
- Dakum NK, Ramyil VM, Misauno MA, Ojo EO, Ogwuche EI, Sani AA. Reasons for cancellations of urologic day care surgery. *Niger J Surg Res* 2006;8:30-3.
- Iliyasu Z, Abubakar IS, Abubakar S, Lawan UM, Gajida AU. Patient's satisfaction with services obtained from Aminu Kano teaching hospital, Kano Nigeria. *Niger J Clin Pract* 2010;13:371-8.
- Esimai OA, Omoniyi-Esan GO. Wait time and service satisfaction at Antenatal Clinic, Obafemi Awolowo University Ile-Ife. *East Afr J Public Health* 2009;6:309-11.
- Bamise C, Bada T, Bamise F, Ogunbodede E. Dental care utilization and satisfaction of residential university students. *Libyan J Med* 2008;3:140-3.
- Ajayi IO, Olumide EA, Oyediran O. Patient satisfaction with the services provided at a general outpatients' clinic, Ibadan, Oyo State, Nigeria. *Afr J Med Med Sci* 2005;34:133-40.
- Uzochukwu B, Onwujekwe O. Healthcare reform involving the introduction of user fees and drug revolving funds: Influence on health workers' behavior in southeast Nigeria. *Health Policy* 2005;75:1-8.
- Ademola-Popoola DS, Akande TM, Idris A. Patients' assessment of quality of eye care in a Nigerian teaching hospital. *Niger Postgrad Med J* 2005;12:145-8.
- Ehiri JE, Oyo-Ita AE, Anyanwu EC, Meremikwu MM, Ikpeme MB. Quality of child health services in primary health care facilities in south-east Nigeria. *Child Care Health Dev* 2005;31:181-91.
- Ajayi IO. Patients' waiting time at an outpatient clinic in Nigeria — can it be put to better use? *Patient Educ Couns* 2002;47:121-6.
- Alakija W. Some factors affecting utilization of health services provided for students of the University of Benin, Nigeria. *Family Practice*. Vol. 5. Oxford: Oxford University Press; 1988.

Abdulkareem: The surgical waiting time initiative

41. Bamisaiye A, Ransome-Kuti O, Famurewa AA. Waiting time and its impact on service acceptability and coverage at an MCH clinic in Lagos, Nigeria. *J Trop Pediatr* 1986;32:158-61.
42. Gukas ID, Nwana EJ, Ihezue CH, Momoh JT, Obekpa PO. Tru-cut biopsy of palpable breast lesions: A practical option for pre-operative diagnosis in developing countries. *Cent Afr J Med* 2000;46:127-30.
43. Olasinde TA, Handl-Zeller L. Influence of size of primary breast tumour on local control. *Afr J Med Med Sci* 1993;22:65-8.
44. Bruni RA, Laupacis A, Levinson W, Martin DK. Public involvement in the priority setting activities of a wait time management initiative: A qualitative case study. *BMC Health Serv Res* 2007;7:186.
45. Briggs RJ, Smith KM, Dejager EM, Callahan JT, Abernethy JA, Dunn EJ, *et al.* The active management of surgical waiting lists: A urological surgery case study. *Aust Health Rev* 2011;35:399-403.
46. Mills S. Reducing waiting times in diagnosing patients with endometrial cancer. *Cancer Nursing Practice* 2005;4:34-5.
47. Gray JR, Boland LL, Machermer CH, Nelson MW. Elimination of excess preoperative wait time and its impact on immediate clinical outcomes among patients undergoing spinal surgery. *J Nurs Care Qual* 2010;25:248-54.
48. Jewett M, Rendon R, Dranitsaris G, Drachenberg D, Tanguay S, Donnelly B, *et al.* Canadian surgical wait times (SWAT) initiative. Does prolonging the time to renal cancer surgery affect long-term cancer control: A systematic review of the literature. *Can J Urol* 2006;13 Suppl 3:54-61.
49. Fradet Y, Aprikian A, Dranitsaris G, Siemens R, Tsihlias J, Fleshner N. Canadian surgical wait times (SWAT) initiative. Does prolonging the time to bladder cancer surgery affect long-term cancer control: A systematic review of the literature. *Can J Urol* 2006;13 Suppl 3:37-47.
50. Aiono S, Faber RG, Galland RB. Surgeons have little control over general surgical waiting lists. *Ann R Coll Surg Engl* 2000;82 (9 Suppl):304-7.

How to cite this article: Abdulkareem IH. The surgical waiting time initiative: A review of the Nigerian situation. *Niger Med J* 2014;55:443-51.

Source of Support: Nil. **Conflict of Interest:** None declared.

Announcement

“QUICK RESPONSE CODE” LINK FOR FULL TEXT ARTICLES

The journal issue has a unique new feature for reaching to the journal's website without typing a single letter. Each article on its first page has a “Quick Response Code”. Using any mobile or other hand-held device with camera and GPRS/other internet source, one can reach to the full text of that particular article on the journal's website. Start a QR-code reading software (see list of free applications from <http://tinyurl.com/yzlh2tc>) and point the camera to the QR-code printed in the journal. It will automatically take you to the HTML full text of that article. One can also use a desktop or laptop with web camera for similar functionality. See <http://tinyurl.com/2bw7fn3> or <http://tinyurl.com/3ysr3me> for the free applications.