Republic of Namibia

Ministry of Health and Social Services

Improving the Professional Registration Process of Pharmacy Personnel through Streamlining the Assessment Framework, Methods, and Tools in Namibia

April 2014

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April 2014

This report is made possible by the generous support of the American people through the US Agency for International Development (USAID), under the terms of cooperative agreement number AID-OAA-A-11-00021. The contents are the responsibility of Management Sciences for Health and do not necessarily reflect the views of USAID or the United States Government.

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Muungo, T, Sagwa, E, Mazibuko G and H, Kagoya. 2012. *Improving the Professional Registration Process of Pharmacy Personnel through Streamlining the Assessment Framework, Methods, and Tools in Namibia.* Submitted to the US Agency for International Development by the Systems for Improved Access to Pharmaceuticals and Services (SIAPS) Program. Arlington, VA: Management Sciences for Health.

Key Words

Pharmacy Council of Namibia, Health Professions Council of Namibia, pharmacist, pharmacy assistants, tutor

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ACKNOWLEDGEMENTS

We would like to thank Mr. Cornelius Weyulu, Registrar of the Health Professions Council of Namibia (HPCNa); Ms. Nardia Coetzee, Pharmacy Council Member and Secretary of the Pharmaceutical Society of Namibia; Ms. Melitta Mathe, Pharmacy Council Manager; and members of the HPCNa in general for their constructive inputs and support in the process of this assessment. We also would like to thank all the pharmacists and pharmacists' assistants both in the public and private sector for their valuable input during the consultative meetings held in the country.

ACRONYMS AND ABBREVIATIONS

AIDS	acquired immunodeficiency syndrome
ART	antiretroviral therapy
CPM	Center for Pharmaceutical Management [MSH]
FIP	International Pharmaceutical Federation
HIV	human immunodeficiency virus
HPCNa	Health Professions Council of Namibia
MoHSS	Ministry of Health and Social Services
MSH	Management Sciences for Health
NHTC	National Health Training Centre (of Namibia)
PA	pharmacist's assistant
PCN	Pharmacy Council of Namibia
PSN	Pharmaceutical Society of Namibia
SADC	South African Development Community
SIAPS	Systems for Improved Access to Pharmaceuticals and Services
SOP	School of Pharmacy [UNAM]
SPS	Strengthening Pharmaceutical Systems [MSH]
TOT	training of trainers
UNAM	University of Namibia
USAID	US Agency for International Development
WHO	World Health Organization

EXECUTIVE SUMMARY

The USAID-funded Systems for Improved Access to Pharmaceuticals and Services (SIAPS) Program, implemented by Management Sciences for Health (MSH), conducted a preliminary assessment to evaluate the screening system and processes in use for pharmaceutical practitioners concerning legal recognition to practice in Namibia. This was also conducted to advise the Pharmacy Council of Namibia (PCN) on improvements that can be made to the screening process for the pharmacy practitioner competency assessment and registration/licensure process. The goal is to make more pharmacists, technicians, and pharmacists'assistants (PAs) available to provide appropriate pharmaceutical care services in general and make antiretroviral therapy (ART) in particular more accessible to patients, especially in rural settings. The assessment, conducted on March 17–21, 2014, solicited the views of practitioners, professional societies, and the council.

Pharmaceutical responsibilities cover several health care practices provided for patients in general and HIV and AIDS patients specifically, ranging from dispensing medications to monitoring patients' health and progress, to maximizing their response to the medication. Pharmacists also inform consumers and patients about the use of prescriptions and over-the-counter medications, and provide advice to physicians, nurses, and other health professionals on decisions they make regarding medicines. Pharmacists also provide expertise on the composition of medicines, including their chemical, biological, and physical properties, and their manufacture and use. They ensure the purity and strength of medicines, and make sure they do not interact in a harmful way. Pharmacists are medicine experts who are ultimately concerned about their patients' health and wellness.

Namibia faces a shortage of pharmaceutical personnel.[1] The increased burden that HIV and AIDS has placed on national health systems in general has made this shortage even more severe. At the time of this field survey, the most common opinion of the interviewees was that pharmaceutical staffing in both the public and private health sectors was very low. As a result, more pharmacists and PAs are greatly needed to support pharmaceutical care provision, and the ongoing decentralization of ART services and making ART widely available to HIV-positive patients, especially in far-reaching rural settings.[1]

Observed from the field, foreign-trained personnel constitute the majority of the pharmacist workforce in Namibia, and they are usually on fixed-term contracts (short, medium, or long term).[1] In view of this, the regulatory body that oversees the registration of pharmacy personnel needs to put in place mechanisms to ensure that this profession meets national statutory requirements and simultaneously ensures that adequately qualified staff are registered to practice in the country.

The Namibian Pharmacy Act No. 9 of 2004 (Part II Sections 3, 6, and 15), among other provisions, was enacted to:

- Regulate the registration of pharmacists and practicing professionals allied with the pharmacy profession
- Specify the pharmaceutical education, training, and professional qualifications required for such persons, who would be oriented to practice pharmacy in Namibia
- Regulate the practice of any prospective pharmacy practitioners to ensure they meet legal registration requirements

Accordingly, all persons who have successfully completed any level of prescribed pre-service training in pharmacy must be assessed for their competencies by the PCN to ensure that they have met the minimum requirements of professional practice before they are licensed to practice pharmacy in Namibia.

The Namibian government has engaged in ongoing efforts to address the critical shortage of pharmaceutical personnel in the country through various means, including deliberate recruitment of foreign-trained pharmaceutical personnel, support for Namibian nationals who would qualify for pharmacy training outside the country, and establishment of the School of Pharmacy (SOP) at the University of Namibia (UNAM). In addition, to address some critical and urgent requirements for pharmaceutical personnel, foreign pharmacy professionals have been recruited through a government-to-government arrangement. Such a seemingly complex and comprehensive professional recruitment process would likely face operational challenges. For example, the PCN faces a challenge in its effort to screen and evaluate prospective pharmaceutical practitioners in the country for required competencies using the approved licensure system (screening assessment for professional recognition by the PCN). While such a system exists for Namibian pharmaceutical service provision, it may not be optimally functional.

As a result, the HPCNa through the PCN decided to explore alternative or optional ways of addressing the aforementioned challenges while contributing to human resources for the country's pharmaceutical services. Accordingly, the PCN through the HPCNa requested technical assistance from the USAID-funded Systems for Improved Access to Pharmaceuticals and Services (SIAPS) Program implemented by MSH to improve the pharmacy practitioner competency assessment and registration/licensure process so that more pharmacists, technicians, and PAs are available to make ART and other essential pharmaceutical services more accessible to patients, especially in rural settings.

Based on the preliminary assessment, it was clear that the HPCNa wants to improve the current procedures by streamlining the screening of pharmaceutical practitioners for registration in Namibia and implementing an improved process for benefits of long awaited first-ever graduates from the newly initiated national degree program in pharmacy.

The perception of the pharmacist workforce shortage was found to be more acute than actual workforce statistics demonstrate.[1] Dependency on foreign pharmaceutical staff both at the facility and national levels in the public sector is a valid threat to pharmacist workforce sustainability. Even though expansion of the pharmacist workforce is necessary to meet demands in the private and public sector, such expansion is modest. Assuming that donor-funded posts will continue to exist or be absorbed into the public sector and private pharmacy grows consistently, the workforce required in 2020 is approximately 260, a 50% increase from current workforce levels. This target could be met by scaling up pharmacist training (either locally or by increasing scholarships to study abroad) and improving retention rates in the public sector.[1]

Guidelines for providing pharmaceutical care should be documented to formulate a structured, sustainable, and reliable professional assessment system. As a legal entity with a mandate to monitor and control the professional processes in providing pharmaceutical care services to the people of Namibia, the PCN should ensure that:

- Regulations or rules that respond to the legal provisions of the practice of pharmacy

- Training standards are formulated and documented
- Effective partnerships for implementing the provision are identified and some roles are delegated, as required
- Prospective mentors or tutors are identified and trained in a manner that can be applied elsewhere in order to maintain uniform standards for professional mentorship processes and development
- As a starting point in internship training, a training of trainers (TOTs) group is formed during formal training orientation

BACKGROUND

Overview of Pharmaceutical Service Staffing in the Country

The role of pharmacists in the health care system is defined by the medicines and information they provide. Pharmacist responsibilities include providing a range of health care services to patients in general and HIV and AIDS patients specifically, including dispensing medications, monitoring patient health and progress, and maximizing patients' response to the medications. Pharmacists also inform consumers and patients about the proper use of prescriptions and over-the-counter medications, and give advice to physicians, nurses, and other health professionals on decisions concerning medicines. Pharmacists also provide expertise on the composition of medicines, including their chemical, biological, and physical properties, and their manufacture and use. They ensure the purity and strength of medicines and ensure that medicines do not interact in a harmful way. Ultimately pharmacists are medicine experts who are concerned about their patients' health and wellness.[2]

Prior to independence in 1990, pharmacists were predominantly white. Immediately after independence, there was a rapid transfer of pharmacists from the public sector to the private sector and to South Africa. During that time public sector hospitals at the district level had very few pharmacists. In response, the government enacted two key policy measures to rectify this crisis: (1) pharmacist posts in district hospitals were disestablished, and (2) a cadre of PAs was created to fill these gaps by providing basic dispensary services.[1]

Pharmacists transitioned into assuming primarily supervisory and administrative roles in the districts to oversee pharmaceutical services (regional pharmacists). Pharmacists, who were mostly foreign, worked in the major secondary (district) and tertiary hospitals and the public sector administration (MoHSS). There has been no growth over the last 20 years in public sector posts and continued reliance on the recruitment of a foreign pharmacist workforce.[1]

As part of the government's efforts to address this, since about 2006 donors have played an important role in creating and funding short-term pharmacist and PA posts in the districts to build capacity for HIV and AIDS and other pharmaceutical services. Further recognition of the need to expand the pharmacist workforce was demonstrated by MoHSS's recent decision to expand coverage of pharmacists into every district hospital—effectively a near doubling of public sector posts.

In collaboration with donors, MoHSS began to recruit pharmacists and PAs for the public sector to support donor-supported programs and fill critical gaps. This has resulted in a greater rate of success in filling posts at most public health facilities in the country. However, of the 46 pharmacist posts in MoHSS as of March 2009, 13 remained vacant.[1]

PAs have continued to be the mainstay of basic pharmaceutical services in the public sector outside the major urban centres. With support from SIAPS and the Strengthening Pharmaceutical Systems (SPS) Program, funded by the US Agency for International Development (USAID), the output of PAs from the two-year certificate program at the National Health Training Centre (NHTC) has increased significantly from 8 to 27 per year, with support from other donors during the last two years. A projected total of 50 graduates per year is envisioned in the near future.

Community pharmacies were found to predominantly employ pharmacists in this sector compared with a few private hospital pharmacies, wholesalers, and one manufacturer. Registration data collected from the Pharmaceutical Society of Namibia (PSN) in March 2009 showed that 78 pharmacies and 109 pharmacists worked in this sector. No data was collected for PAs or pharmacist interns. Private pharmacies and pharmacists are concentrated in the urban centres of Namibia. These pharmacies are predominately owned by white Namibians and South Africans. [1]

Most pharmacists were concentrated in the urban centres in both the private and public sectors. Donor-funded posts were more equitably distributed between the regions due to their purposeful deployment into regions where there was a lack of pharmacists. Public sector pharmacist posts were found to be concentrated in the Khomas (which includes Windhoek and Katutura) and Oshana regions, where major secondary and tertiary hospitals are located.[1]

About 50% of private pharmacists were found to be located in Khomas and most of the rest in the urban and tourist centres of Erongo and Oshana, with very few in the other regions.

Despite the absence of private pharmacies in most regions and districts, illegal medicine outlets have not been found to operate in Namibia, which is a benefit to genuine pharmaceutical care provision. The public sector constitutes an important source of medicines for rural communities.

Overview of Pharmaceutical Education and Training in the Country

PAs, Certificate Course

The training of PAs in Namibia is a long-standing program that evolved from an informal, hospital-based program initiated in 1991 to a more formalized certificate course based at the NHTC in 1994. Currently, the NHTC course is the only approved PA certificate program in Namibia; however, informal training opportunities (primarily based on the South Africa's model of apprenticeship training of PAs at private community pharmacies) are said to still exist.[1]

SPS entered into a collaborative relationship with the Namibian Ministry of Health and Social Services in about 2009 to expand the capacity of the NHTC to train PAs. The collaboration included using funding from the US President's Emergency Plan for AIDS Relief (PEPFAR) to refurbish lecture rooms, develop a simulation laboratory, and provide tutors. In addition, NHTC collaborated with SIAPS and SPS to update the PA training curriculum so that the course was registered under the National Qualifications Framework (NQF), accredited by the Namibia Qualifications Authority, and supported by the Namibia Training Authority (NTA). Again, at the time of this survey, NQA's and HPCNa's approval processes were in their final stages.

As a result of this support, NHTC increased PA training from a previous annual average of 8 students per year to the current average of 27 students per year, with a target of training 50 students per year as of 2010. This increased number and quality of PAs graduating from the centre was aimed at increasing their capacity to deliver critically needed pharmaceutical care services to the people of Namibia.

Despite these many advances, some challenges associated with this training program remain. Most critically, the program tutors who were all externally funded (i.e., SIAPS, SPS, and Global Fund) have since resigned and at the time of this consultation, only one tutor at the NHTC worked with more than 20 PA students.

Some stakeholders felt that after PAs gained work experience, a small percentage of PAs would be prepared for further training in the field. Hence, some stakeholders stated that establishing a pharmaceutical technician diploma course would be appropriate to ensure career articulation and advancement to a pharmacy degree program. During this visit, interest in developing/maintaining such a course was expressed directly by UNAM, NHTC, and indirectly by the Polytechnic. Other countries (notably Malawi and Zambia) have used the pharmaceutical technician category as a potential recruitment pool for pharmacy degree training, particularly for initial cohorts. Other stakeholders, however, felt that the need for pharmacists was a higher priority and that the efforts to establish the degree course should be the initial focus in light of the limited resources available. When applying the principles of the NQF, it seems appropriate that competencies required across the continuum of pharmaceutical cadres (i.e., PA, senior PA, pharmaceutical technician, and pharmacist) should be scoped prior to initiating any new educational programs.

Pharmacists, Degree Course

Four pathways to becoming a pharmacist in Namibia currently exist, according to the country's recruitment policy for pharmaceutical personnel:

1) A Namibian is locally trained as a pharmacist at UNAM and follows approved national procedures to register legally as a pharmacist – a one-year internship and registration by the PCN.

2) A Namibian leaves the country to train as a pharmacist and returns to adhere to approved national procedures to register legally as a pharmacist – a one-year internship and registration by the PCN.

3) A non-Namibian trains as a pharmacist and migrates to Namibia to follow approved procedures to register legally as a pharmacist or have the option of undergoing a similar program outside Namibia and be registered in Namibia as a pharmacist – a one-year internship or its equivalent outside the system and registration by the PCN.

4) A non-Namibian trains as a pharmacist and migrates to Namibia to practice pharmacy having taken a similar program outside Namibia and becomes registered in Namibia as a pharmacist – a one-year equivalent internship and registration by the PCN.

Although the South African Development Community (SADC) region has established quotas to ensure that countries without pharmacy degree courses have access to such training programs, reliance on these externally mediated pathways has led to an underdevelopment of pharmacy as a career pathway in Namibia and the instability of the public sector workforce.

What's more, surveys suggest that Namibian youth do not appear to prefer pharmacy as a desirable or viable career option. Although they can receive loan and grant support from the Ministry of Education and MoHSS, these do not cover the additional costs of studying abroad. Moreover, in recent years, the number of qualified Namibian students seeking

pharmacy degree qualifications has been fewer than the number of slots available, suggesting that the barriers are more complex that mere access.

A review of previous reports and stakeholder interviews suggest that perceived barriers to pursuing pharmacy studies include:[1]

- Lack of awareness of pharmacy as a career option
- Lack of awareness of the number and variety of jobs available within the field of pharmacy
- Lack of adequate preparation in math and sciences at the secondary-school level
- Preparatory two years of university study (pre-med course) required for most Namibians planning to study pharmacy abroad
- Excessive costs (despite loan and grant support) associated with studying abroad
- No mechanism in place for study loan forgiveness based on employment in the public sector or similar public sector retention strategies

Overview of Pharmaceutical Responsibilities of the PCN in the Pharmacy Professional Screening Assessment Process

The Namibian Pharmacy Act No. 9 of 2004 (Part II, Sections 3, 6, and 15), among other measures, was enacted to:

- Regulate the registration of pharmacists and practicing professionals who are allied to the pharmacy profession
- Specify the pharmaceutical education, training, and qualifications for such persons who would be oriented to practice pharmacy in Namibia
- Regulate the practice of any prospective pharmacy practitioner with legal registration requirements

All persons who have successfully completed a prescribed pre-service training in pharmacy are required to be assessed for their competencies by the PCN to ensure that they have met the minimum level of professional practice required before they are licensed to practice pharmacy in Namibia.[3]

Such a seemingly complex professional recruitment process would likely present operational challenges. Currently, the PCN is faced with such challenges in its quest to screen and evaluate prospective pharmaceutical practitioners in the country for the required competencies using the approved licensure system (screening assessment for professional recognition under the PCN). While such a system exists for provision of pharmaceutical services in Namibia, it may not be optimally functional.

PURPOSE OF CONSULTANCY

Dr. Tyson L.M. Muungo, a University of Zambia Head Lecturer and Designate Dean of the School of Pharmacy at LAMU, and a member of the Global Health Force, International Pharmaceutical Federation (FIP), travelled to Windhoek, Namibia to assess the scope and effectiveness of pharmaceutical care services and to conduct a workshop for concerned stakeholders on provision of pharmaceutical care services to people in Namibia. The trip had the following four purposes:

1) Gather and review relevant materials on best practices for licensure and regulation of pharmacy practitioners, both regionally and globally, and to explore how such approaches may be taken in Namibia

2) Conduct in-country consultations and obtain the perspectives of, among others, the registrar of the HPCNa, President of the PCN, Education Committee members/evaluators of the PCN, University of Namibia (UNAM) School of Pharmacy (SOP), NHTC/PA training program, representatives of the PSN, practicing pharmacists and PAs and gather their perspectives

3) Develop a council framework, methodology, and tools for evaluating competencies of pre-registration pharmacists and PAs for suitability to register to practice in Namibia

4) Train and orient PCN evaluators on the developed framework, methodology, and tools to ensure standardization and consistency in the evaluation of applicants applying for licensure to practice pharmacy in Namibia

SCOPE OF WORK

The scope of work for this initiative included providing technical assistance to:

- Develop training manuals, TOT, and tutors' training sessions
- Determine standards in internship and adjunct training
- Guide curriculum design and development in internship and adjunct training
- Set up regional networks and establish linkages with running systems
- Identify and explore collaborative opportunities with the other systems regionally or globally

Activities

The scope of work included:

- Gathering preliminary data on all functional systems regarding professional screening assessments both regionally and globally
- Conducting a field survey on selected operational sites where pharmaceutical care provision is vital so as to obtain the views of such stakeholders
- Reviewing the raw data
- Formulating documented procedures in a structured and reproducible manner for professional screening assessments in the country

Collaborators and Partners

A list of stakeholders interviewed as part of this consultancy can be found in annex B.

METHODOLOGY

Gathering and Reviewing Relevant Materials

- Literature reviewed covered both regional and global functional systems that can easily be applied

- Regional systems considered were those of South Africa and Zambia

- Global systems considered were those of United Kingdom, United States, Canada, Australia, and France

During this first consultative trip, the consultant held interviews and discussions with the following:

- Chief pharmacist: NMPC from MoHSS
- Associate dean at the UNAM SOP
- Lecturer/trainer from NHTC
- President of the PSN
- Private sector pharmacists from both the medical centre and community-based pharmacy
- Public sector pharmacists from both the health centre and hospital-based pharmacy
- Public sector PAs from a clinic-based pharmacy
- Education Committee members/evaluators of the PCN
- Registrar and deputy registrar of HPCNa

Day 1 (February 17, 2014)

Meeting with the Division of Pharmaceutical Services at MoHSS

The meeting with staff at the Division: Pharmaceutical Services covered the following areas of pharmaceutical operations, with the corresponding responses.

Staffing Levels, Extent of Shortfalls, and Source of Professional Pharmaceutical Personnel for the Public Sector Pharmaceutical Care Service Provision[1]

- Pharmacist staffing levels at public sector health facilities were described as very low

- The extent of the shortfalls involved the majority of health facilities that are supposed to be staffed by pharmacists but still lack such health workers

- Professional pharmaceutical personnel was said to consist of a combination of Namibians, a majority of foreign pharmacists mainly from SADC-member countries, and a few from other countries such as Cuba

The current screening process that the PCN administers for registration of prospective pharmacy practitioners (submit intention to register in Namibia, PCN

conducts both verbal and written screening interviews, then applicants qualify or not for registration):

- They described it as mainly unplanned or poorly organized, and said it lacks a practical focus (relegated to a mere academic exercise) due to the poor quality of questions approved for professional assessment.

- The structural arrangements and the scope of questions tend to be more subjective than objective.

The individual practical experiences and opinions occurring under the current public sector system with respect to challenges and possible positive outcomes:

- Administrators of pharmaceutical services generally feel operationally inadequate due to a perpetual shortfall of human resources to play the last mile pharmaceutical service provision.

- The assignment of service duties to field workers (pharmacists and PAs) has also posed a challenge because of staff shortages. The delegation of pharmacists' roles to PAs was meant to address the critical shortage of appropriate qualified personnel for these health operations, especially at ART sites.

- Foreign-trained pharmacists require an appropriate orientation program to make use of competence-based skills they have acquired and develop harmonized pharmaceutical care service provision in Namibia.

- The assessment process for registration should take into account the period in which foreign-qualified pharmacists practiced prior to applying for registration as pharmacists in the country.

Meeting with Staff of UNAM SOP

The meeting covered the following areas of pharmaceutical operations, with the corresponding responses.

Staffing Levels, Extent of Shortfalls, and Source of Qualified Teaching Staff at the School

- They described the levels of teaching and research staff for SOP as inadequate (four qualified lecturers and two assistants). The infrastructure was adequately developed at the start and would either be supplemented or replaced on a long-term basis.

- The shortfalls covered several of the school's departments (such as pharmaceutical technology, pharmacognosy, and pharmacology) that were still handled by temporary or part-time teaching staff since appropriate qualified professionals were not readily accessible or available.

- Qualified staff members at the school still include non-Namibians. At the time of the visit, only two Namibians with acceptable postgraduate qualifications were engaged as

pharmacy faculty while three members had first degrees and were engaged as assistant lecturers. Three other faculty staff members were on short-term attachments to the school, after which they may produce vacancies if arrangements are not made in advance for other staff attachments.

The plans in the pipeline to orient upcoming pharmacists from the local degree training program to incorporate them into a pharmacy practice sometime this year:

- The plan is in its initial stages and a variety of models of operations are being considered. For competency assessment, it is proposed that it be administered to outgoing pharmacy students just before their internship period at the hospitals.

- The structural facilities that may be appropriate for the newly qualified pharmacists must be defined and identified while the students are clearing their written academic exit examinations.

- The mode of internship training and its objectivity should be well-defined in terms of its appropriateness to the country's needs.

The practical experiences and opinions expressed under the new academic arrangements for the school in terms of challenges and possible positive outcomes:

- The establishment of the School of Pharmacy in the country has been considered long overdue. It has faced short-term operational challenges, particularly staffing.

- Short-term lecturers meet immediate needs at the school but pose operational challenges in the long term. It is still necessary to find ways to address such long-term challenges at the school.

- Some physical and structural facilities at the school have yet to be completed, resulting in some of the teaching modules not being concluded, such as pharmaceutical technology.

- Developing an appropriate orientation program to introduce the prospective locally trained new pharmacists into pharmacy practice presents a challenge since the current method of assessment may not lend the required objectivity to their orientation.

- The school program must comprehensively orient someone through the academic stages in order to be considered a standard that regulators should follow.

- The school must address operational challenges before the academic unit is regarded as a reference point for professional pharmacy training.

Meeting at the NHTC

The meeting covered the following areas of pharmaceutical operations, with the corresponding responses.

Staffing Levels, Extent of Shortfalls, and Source of Qualified Teaching Staff at the School

- They described the levels of teaching and practical demonstrating staff at the centre as critically inadequate. However, the physical facilities have been adequately rehabilitated.

- The interviewee who presented at the meeting stated that he was teaching a wide range of subjects and topics for the program due to a critical shortage of appropriate qualified pharmacy personnel who could handle other areas of teaching at the centre.

- Nearly all qualified staff members at the centre are non-Namibians. To illustrate this point, the one person interviewed was non-Namibian.

The plans in the pipeline to orient prospective PAs from an academic training into a pharmacy practice perhaps along with degree certificate qualifications:

- The program was described as being in its initial stage since it was supported by the MoHSS, and the mode of training and orientation was still being assessed by the regulatory council for its appropriateness.

- The interviewee indicated that structural facilities that may be appropriate for practical training of PAs must be defined and identified.

- The mode and scope of practical training and its objectivity should be well defined with respect to its appropriateness.

The practical experiences and opinions expressed under the new academic arrangements for the centre in terms of challenges and possible positive outcomes:

- During the visit a lecturer said he felt overwhelmed about applying himself to every aspect of the centre's activities because there is so much that needs to be done about teaching, practical demonstrations, and administration by either one person or a skeletal staff.

- The interviewee and all of the other interview process participants cited the rehabilitation of operations at the centre by SPS. They said SPS had done a good job of rehabilitating both the physical building structures and the acquisition of equipment required for training.

- Short-term lecturer staffing requirements at the centre are critical while long-term operational requirements for staffing needs are considered.

- Physical and structural facilities at the school have yet to be completed pursuant to long-term training strategies at the centre.

- An orientation program for the PAs must be well-defined and established to be used as a reference point for those who would enter the pharmacy field as PAs in the country.

- The school program must comprehensively orient someone through the academic stages

to be considered a standard for regulators to follow. Further, the centre must address operational challenges before the academic unit is regarded as a reference point for those who may apply as assistants in the pharmacy field in the country.

- Global operational standards can be opted into pharmacy training programs either locally or regionally (FIP standards).[4]

Day 2 (February 18, 2014)

Meeting with the President of the PSN

The meeting covered the following areas of pharmaceutical membership and operations in the country, with the corresponding responses.

Professional membership of pharmaceutical personnel, process of membership, and the scope and extent of involvement of the organization in the professional screening process currently administered by the PCN:

- Professional membership in the society is still voluntary. As a result, professionals decided on an individual basis whether to be a member, resulting in a less-coordinated professional grouping.

- No established process exists for membership in the society other than belonging to the same professional register maintained by the Pharmacy Council. This grouping may lack a formal platform for critiquing non-professional trends within the professional ranks.

- The PSN's scope of operational involvement in professional screenings by the PCN is very limited and indirect since the society lacks legal recognition in the country's pharmaceutical operations. However, it could be delegated some functional roles by the PCN through its regulatory framework.

- The extent of PSN's operational involvement in professional screenings by the PCN is insignificant and indirect since the society has opted into some of the operations, especially the internship training, because some members would have paid the council to participate in such an activity. This is regarded as a means of enriching an individual's curriculum vitae content and a way of accruing points for the CPD process.

The rating of the current screening process followed by the PCN for registration of prospective pharmacy practitioners:

- They said it is largely unplanned or poorly organized, and lacks practical focus (relegated to a mere academic exercise) due to the poor quality of questions approved for professional assessment.

- The structural arrangements and the scope of questions tend to be subjective than being objective.

- The internship training for the pharmaceutical personnel emphasized two main areas of training at the hospital and community pharmacy, with an optional third leg. The two

would be preferred as a majority of pharmaceutical competencies critical to the effectiveness of pharmaceutical personnel at work.

- The president of PSN highlighted the need to promote harmony within the screening process among the qualified and experienced pharmaceutical personnel from other countries.

- With respect to who should administer the internship training, the president suggested that it is the council's responsibility as currently stipulated under the arrangement while also delegating some regulatory components of the assessment process to other relevant bodies such as PSN. Not only would this enable the society to exhibit its professional potential but exercise professional control in the process.

- With regard to whether incentives should be provided during the internees' mentorship period, the president believed it would be fair either way. The majority of society members readily assume their mentorship roles for the trainee pharmacists without receiving any incentives. However, they make membership payments to the council on a regular basis to remain on the register of recognized tutors.

The practical experiences and opinions of being the current president of the society for a group of professionals without legal recognition in terms of the challenges faced and possible positive contributions by the society:

- As current president of the society, he feels alone and not supported by other members.

- The society as a whole is at a disadvantage with regard to professional togetherness because the society is still regarded as a club of people with common social interests without any professional connotation.

- The potential of such professional groups as PSN regarding modern health care dispensation needs to be exploited by the prospective legal powers.

- The society's activities could be integrated into the council's functional roles for enhanced pharmaceutical care services to the Namibian public.

- Because membership in the society is optional, well-intended professional programs that the society executes may not in the main have any operational impact on people's preferences.

- The society has long made requests to the council to be involved in professional activities and it has always delivered as required. The council now is being asked to pursue more avenues that would harmonize its activities with the society's and build effective team work rather than the current ad hoc system.

- While functional roles may be exchanged in cases of dire staffing needs, professional role exchanges should strictly be prohibited to preserve the accountability of the type of patient care being dispensed by the respective health cadres.

- Foreign-trained pharmacists require appropriate orientation programs to harmonize

competence-based skills they have acquired with pharmaceutical care service provision. This is one of the many roles that can be introduced to the trainees by the PSN on behalf of the council.

- The assessment process for registration should take into account the period before foreign-qualified pharmacists apply for registration as pharmacists in the country. Again, this is one activity the society would be pleased to administer on behalf of the council.

Meeting with Private Sector Community-Based Pharmacy Practitioner

This covered aspects of the professional roles emanating from the community-based pharmacy shop, extent of regulatory monitoring to such community-focused pharmaceutical care services, range of services offered, professional interaction with other community pharmacies or pharmacists, and any regulatory roles that the shop may be assigned by the council if warranted.

Professional Roles Emanating from the Community-Based Pharmacy Shop

The community pharmacy is facing many operational challenges because other service providers do not yet believe that the pharmaceutical care concept ideally applies to that pharmacy. As a result, the range of community-based pharmaceutical services are critically narrow, leaving the community pharmacy to play the most generic role, i.e., bringing essential medicines close to the people at a profit.

The extent of the community pharmacy's operations is limited by affordability and the neighborhood of the prescribers, whose range of patients may also be limited. The one shop frequented depends on the neighborhood in which nursing homes are located, whose patients may be frequent customers at the pharmacy.

Extent of Regulatory Monitoring of Such Community-Focused Pharmaceutical Care Services

- Because of the low level of staffing at the council level, regulatory monitoring and controls there are functionally insignificant.

- Probably the only time they are seen at the site is during verification exercises following approval of the proposal to formalize its operations. Thereafter, the council does not conduct any known follow-up inspections.

- To improve services provided at this level of pharmaceutical care, the council through the professional membership can enter into an effective partnership with community pharmacies to provide all critical forms of care, which may include patient counseling on medicine storage and use.

- The internship training for the pharmaceutical personnel emphasized two main areas in hospital and community pharmacy, with an optional third area (industrial pharmacy). The two would be preferable since they constitute the majority of pharmaceutical competencies that are critical to the effectiveness of pharmaceutical personnel at work.

- Regarding who should administer internship training, the practitioner agreed to the current arrangement, where the responsibility should be assigned to the council with delegated duties undertaken by an identified component of the pharmaceutical society group, such as community pharmacies, and hospital pharmacies.

- As for incentives during the mentorship period for the internees, the community pharmacist expressed happiness either way. He is one of those currently doing it without any incentives.

Range of Services Offered

- These services are limited considering the logistical position of the shop and the type and range of activities in the neighborhood, as already mentioned.

- They will also be limited by the strength of the country's economy (the trading strength) that the public can avail itself of at any given time.

- Regulations currently may have a very limited effect on the range of services that may be offered since they do not hinder the provision of such services.

- The potential and benefits of that level of pharmaceutical care services is enormous if exploited by relevant players.

Meeting with Public Facility Pharmacist at Katutura Health Centre

The meeting covered areas of the professional roles emanating from the community-based pharmacy shop, the extent of regulatory monitoring of community-focused pharmaceutical care services, the range of services offered, professional interaction with other community pharmacies or pharmacists, and any regulatory roles that the council may assign to the shop, as needed.

Professional Roles Emanating from the Community-Located Pharmacy Health Centre

- Being a public health facility, it is located in a community to provide a specialized type of treatment, and is a MoHSS health centre.

- The centre provides patient counseling on HIV medicine treatment regimens. Because of that, the range of community-based pharmaceutical services is narrow, leaving practically the most generic role to the community pharmacy, i.e., bringing essential medicines close to the people but at no profit to a public utility.

- The extent of such a public facility's operations is limited by the range of medicines the centre is allowed to handle in line with the specialized type of illness the centre is managing.

Extent of Regulatory Monitoring of Such Community-Focused Pharmaceutical Care Services

- Being a government facility, it is not included in the monitoring regularly conducted to verify pharmaceutical operations at the centre.

- However, the facilities are good enough to provide any level of mentorship to a new pharmacist or PA.

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Range of Services Offered

- These services are limited considering the centre's logistical assignment.

- The potential and benefits of such pharmaceutical care services is enormous if exploited by relevant powers.

Professional Interaction with other Community Pharmacies or Pharmacists

Interaction among community-based public facilities is very rare due to the special types of operations with which each centre may be identified.

Regulatory Roles that the Centre May be Assigned by the Council If Need Be

- These are government facilities and are at the will of government operations used by the council to improve the well-being of people targeted in such a community.

- For now, ART provision by such an establishment is the most common one.

- However, there are many other avenues the council can take, such as promoting and monitoring the use of medicines in the community for optimal therapeutic outcomes, including the provision of home-based care in terms of medications prepared and taken from home facilities.

- Another role is identifying and monitoring patients from homes who are in long-term treatment programs such as those with lifestyle illnesses, and providing patient education on the use of medicines.

Meeting at Beulah Community-Based Pharmacy

Late in the afternoon, the team went to the Beulah Medical Centre pharmacy, which serves the medical centre clients and the surrounding community. We were welcomed by the director of the pharmaceutical establishment (Mrs. Tangeni Angula, Pharmacist).

A general introduction was given and the objectives of the meeting were established. The meeting covered the professional roles emanating from the community-based pharmacy shop, the extent of regulatory monitoring of such community-focused pharmaceutical care services, the range of services offered, professional interaction with other community pharmacies or pharmacists, and any regulatory roles that the council may assign to the shop, if needed.

- Generally the sentiments expressed by the community pharmacist previously interviewed were shared later by another community pharmacist except that due to the logistical differences of their localities, their scope of duties may also be slightly different.

- The community pharmacy that was visited later is within a medical centre. The difference this time is that it is in the private sector.

Day 3 (February 19, 2014)

Meeting at Katutura Intermediate Hospital

About mid-morning the team went to Katutura Intermediate Hospital and was welcomed by the Pharmacist In-Charge, Ms. Winnet Murerwa.

The meeting covered the following areas of pharmaceutical operations, with the corresponding responses.

Staffing Levels, Extent of Shortfalls, and Source of Professional Pharmaceutical Personnel for Public Sector Pharmaceutical Care Service Provision

- She described the pharmacist staffing level at the hospital as critically low, noting that she was the only one of six pharmacists there who was legally registered while the rest were either trying to register or were in operation through the authorization process.

- The extent of the shortfalls was related to the limited degree of pharmaceutical care provision, which was not covering the in-patients at the hospital or some of the health facilities being serviced by the hospital.

- At the health centres that are under this hospital, some professional roles have been delegated to the PA, resulting in a compromised system.

- Many functions that are supposed to be assumed by pharmacists, e.g., proper use of medicines, are assumed by the PA.

The rating of the current screening process that is being followed by HPCNa for appropriate registration of prospective pharmacy practitioners:

- It was described as inadequate due to the poor quality of questions approved for professional assessment.

- Many people are potentially failing these assessment examinations because they are inappropriate.

- The structural arrangements and the scope of questions reportedly tend to be subjective than being objective.

The practical experiences and opinions under the current public sector system in terms of challenges and possible positive outcomes:

- The workload is overwhelming due to a shortage of qualified pharmaceutical personnel for the operations.
- Foreign-trained pharmacists require a proper and appropriate orientation program to harmonize competence-based skills they have acquired with pharmaceutical care service provision. Foreign-trained pharmacists are seen as arriving with a variation of professional skills, which impacts the harmony required in pharmaceutical care provision.
- The assessment process for registration should take into account the period of practice by foreign-qualified pharmacists before they applied for registration to work as pharmacists in the country.

Meeting at Khomasdal Clinic

Early in the afternoon, the team went to the Khomasdal clinic and was welcomed by the PAs .

The meeting covered the following areas of pharmaceutical operations, with the corresponding responses:

Staffing Levels, Extent of Shortfalls, and Source of Professional Pharmaceutical Personnel for Public Sector Pharmaceutical Care Service Provision at the Clinic

- The level of pharmaceutical personnel generally is generally very poor at the hospitals and clinics, and was described as critically low since they were reassigned from health centre facilities to make up for the gap.
- At the health centre, pharmaceutical professionals are functionally unavailable, creating an opportunity for PAs to take up the roles of pharmacists in providing pharmaceutical care service.
- The PAs also expressed a need for the government to promote CPD programs among the pharmaceutical personnel in order to encourage the PAs to strengthen their qualifications with the aim of improved pharmaceutical care provision.
- PAs were more locally generated, mostly from NHTC, with only a small number coming from outside the country.
- A career pathway for the assistants has not been well articulated, which has resulted in stagnation in career progression for the majority of them.

The rating of the current screening process that is being followed by HPCNa for appropriate registration of prospective PAs:

- So far this process has not been formalized for the PAs except for practical sessions they take as part of the academic training.
- However, payments by students to the council for the practical sessions have always been

made during the course of the academic mentorship at the centre.

- The functional roles of the pharmacists and PAs at this level of health care provision have not been differentiated.

The individual practical experiences and opinions under the current public sector system in terms of challenges and possible positive outcomes:

- As PAs, both expressed concerns about the work protocols with regard to pharmaceutical processes. They were unsure to whom they were responsible in terms of pharmaceutical procedures since they were mostly interacting with medical officers at the centre on a daily basis on pharmaceutical issues.

- After interacting with trained pharmacists, they agreed that foreign-trained pharmacists require an appropriate professional screening program to harmonize competence-based skills they have acquired with pharmaceutical care service provision.

Day 4 (February 20, 2014)

Meeting with the Registrar and Deputy Registrar, HPCNa

Around mid-afternoon, the team went to the HPCNa offices and was welcomed by the Deputy Registrar for HPCNa, Mr. Crispin Mafwila and the Registrar, Mr. Cornelius Weyulu.

The meeting covered the originality of the Health Council establishment, the scope of operations, the role of the council in the current consultancy activities by SIAPS and activities that could be undertaken in collaboration with others.

- Prior to the establishment of the council in its current form and framework, there were several Health Boards per district and such an establishment in a public health sector then was not only administratively top-heavy and bureaucratic, but also very expensive to manage.

- In 2004 this administrative structure was dismantled in favor of a system that was less bureaucratic and less expensive to manage.

- Five professional councils were created in 2004 under the umbrella of the National Health Council, with a secretariat for the councils' operations.

- The professional councils were established through an act of parliament, and consisted of the:

    - PCN, with the relatively smallest number of members among other councils
    - Nursing Council, with the relatively largest number of members among other councils
    - Allied Professions Council, which was a combination of other health professions
    - Medical and Dental Council, which was a combination of the two professions
    - Social Work and Psychology Council, which was a combination of the two professions
    - HCPNa, which served as the secretariat for the other five professional councils

- Membership in any of the professional councils was governed by elections. Since this type of membership recruitment poses challenges, the system is being revised so that appointment to council membership will occur through nominations. The appointing authority will receive more than one recommendation for a position on the council.

- The establishment of these professional councils was based on the significance of the respective professional protocols for patient care provision being the main interest of a government.

- Over the years, this has faced operational and establishment challenges. In the pharmacy field, for example, a council has been established to help with recruitment of appropriately oriented pharmacy personnel who would fit into the national system for required pharmaceutical service provision.

- This council is legally mandated to guide the country toward using properly qualified personnel who would be recommended to the HPCNa for registration.

- In practice, this aspect of the legal requirement to screen for properly qualified pharmaceutical personnel has not yielded the results desired. There has been a perpetual shortage of personnel who can provide proper pharmaceutical care to the public. This is in addition to a screening process involving written examinations in which operational challenges exist that have resulted in questions being raised about the screening methodology employed by the examination team.

Day 5 (February 20, 2014)

Meeting with the Education Committee of the PCN

Around mid-morning, the team went to the HPCNa offices and was welcomed by the secretariat team of the PCN, Ms. Melitta Elvira Mathe (Manager of the PCN). The Education Committee of the PCN was represented by the secretary to the PSN (Ms. Nardia Coetzee) and Dr. Tim Rennie (Associate Dean at UNAM at the SOP). .

The meeting included a brief explanation of the reasons to meet the education committee, followed by a technical assistance brief submission that compared the scenario in Namibia with that in Zambia and the process the latter had to adopt to reorganize the recognition accorded pharmacist applicants in the professional register.

Brief responses were given to members on the following issues, based on their experiences in Zambia and elsewhere in the region:

- Status of the PSN

- The method of assessment that would be used for a Namibian applicant trained abroad

- Non-Namibians applying to be included in the Namibian register of pharmacists and technologists

- Namibian foreign-trained and qualified pharmacists applying for Namibian registration

- When, where, how long, and what type of internship someone has to undergo for registration in Namibia

Second Visit to Namibia, Windhoek, Days 1-5 (March 10-15, 2014)

These days were regarded as office days and were spent with the technical group to review field observations and findings in order to interpret them in a meaningful way. Clarifications were provided on observations contained in the first draft report trip, with the technical team working with the technical assistant. Plans were also made to meet the team from the HPCNa. Sensitization workshops were conducted for key group members from the PCN to review possible gaps in the screening process.

Workshop Meeting with Members of the PCN Education Committee and others with Health-Related Council Members

The meeting was called to conduct a group discussion on issues affecting the HPCNa and relate them to those of the PCN. Any viable solutions to the PCN's challenges were to be shared with the sister council members and, if applicable, vice versa. The time was also used to revisit some of the places covered during the first visit to Windhoek. This involved revisiting UNAM SOP for a practical observation of academic processes, including a practical tour of lecture activities, practical sites, a presentation to the faculty members of an outline of core courses for pharmacist training by FIPEd, and different methods of presenting teaching materials. At Health Technical College, there was no in-person meeting with staff members. However, an arrangement was made to provide advice when needed, with the possibility of graduating from training assistants to technicians or technologists.

Day 6 (March 17, 2014)

The consultant met the technical team for SIAPS and the PCN Education Committee to review and conduct group discussions on concepts within the scope of the professional screening assessment process.[5,6] The following topics were presented, with appropriate feed-back from the selected participants.

Registration Protocols for Pharmaceutical Personnel

- This presentation aimed to highlight the different categories of personnel and operational justification for registration.

- Following this presentation and discussion, gaps in the current screening system were highlighted.

Role of the PCN

- This involved highlighting the legal mandate and what it may require to comprehensively respond to it.

- Again, after this presentation and discussion, gaps in the current screening system were highlighted.

Essential Characteristics of Internship Training

- This involved highlighting ideal situations that may be regarded as critical to a successful professional orientation.

- The presentation highlighted practical guidelines that make up a successful orientation. That led to discussion points highlighting the gaps in the current system.

Pre-Registration Tutor Training Development

- This presentation introduced the need to train the teachers of tutors or trainers (TOT) as standard bearers in the process of training more tutors, as needed.

- Again, this presentation highlighted practical guidelines for realizing a successful orientation outcome.

- Also, the discussion points led them to realize there were operational gaps in the current system.

FINDINGS

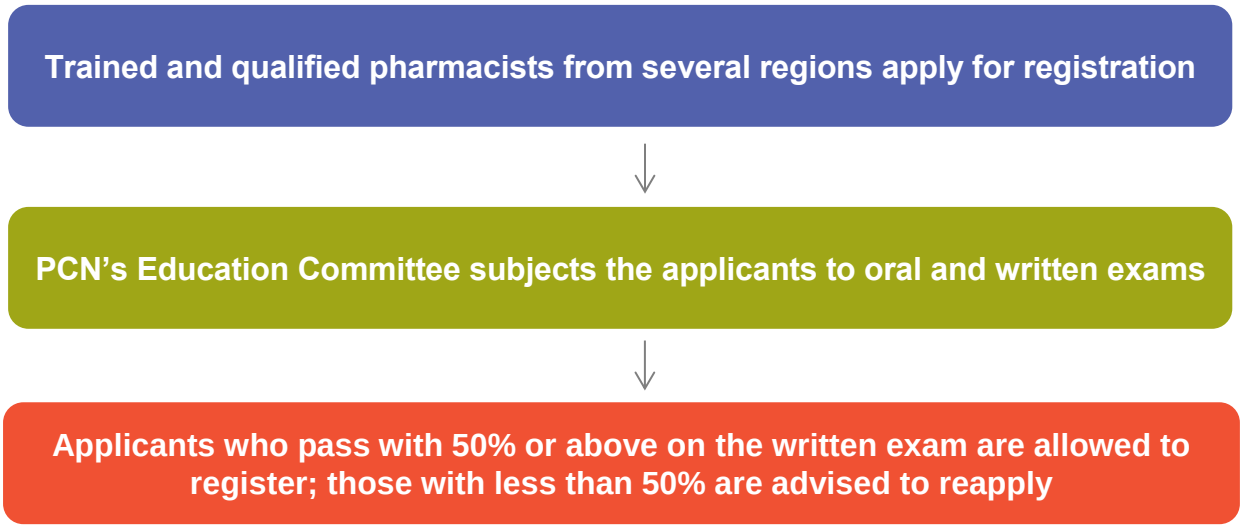

Figure 1. Summarized flow diagram of the current evaluation and registration process for pharmacy practitioners in Namibia

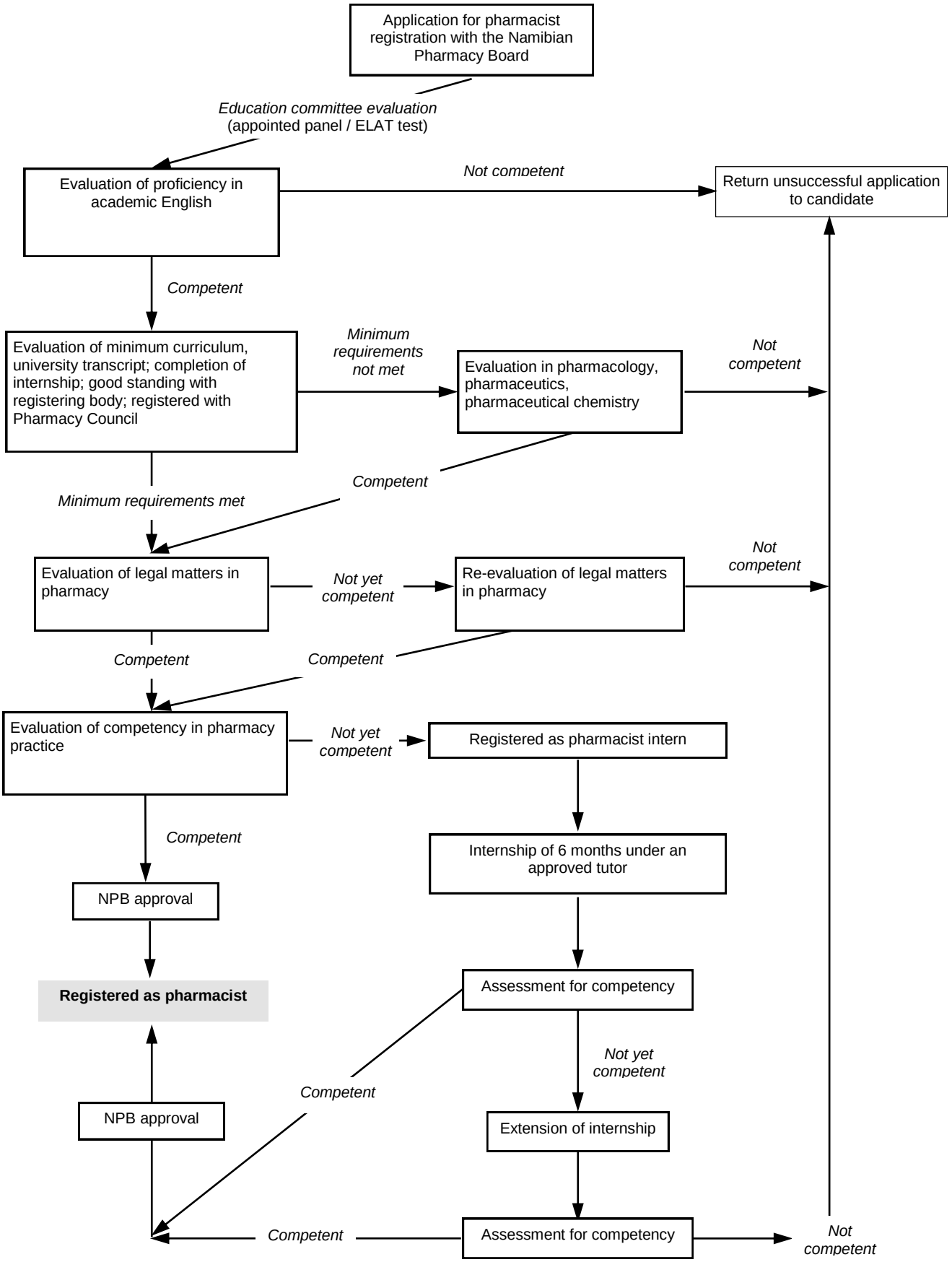

Figure 2. Approved flow diagram of the pharmacist registration process in Namibia

Flow Diagrams of Comparable International Evaluation and Registration Processes for Pharmacy Practitioners

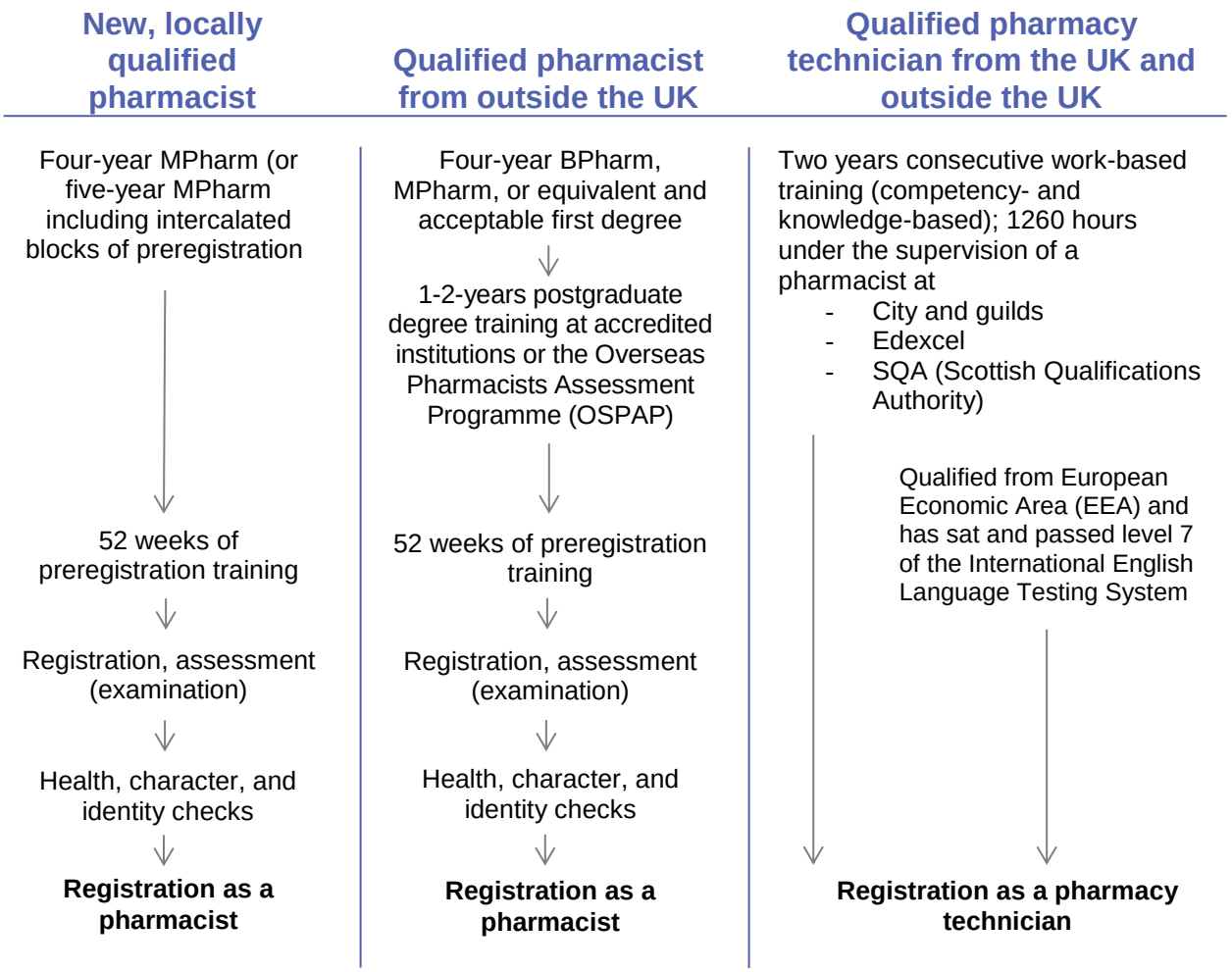

Figure 3. The UK initial education, training, and registration requirements for locally and foreign-trained pharmacists and technicians[6–10]

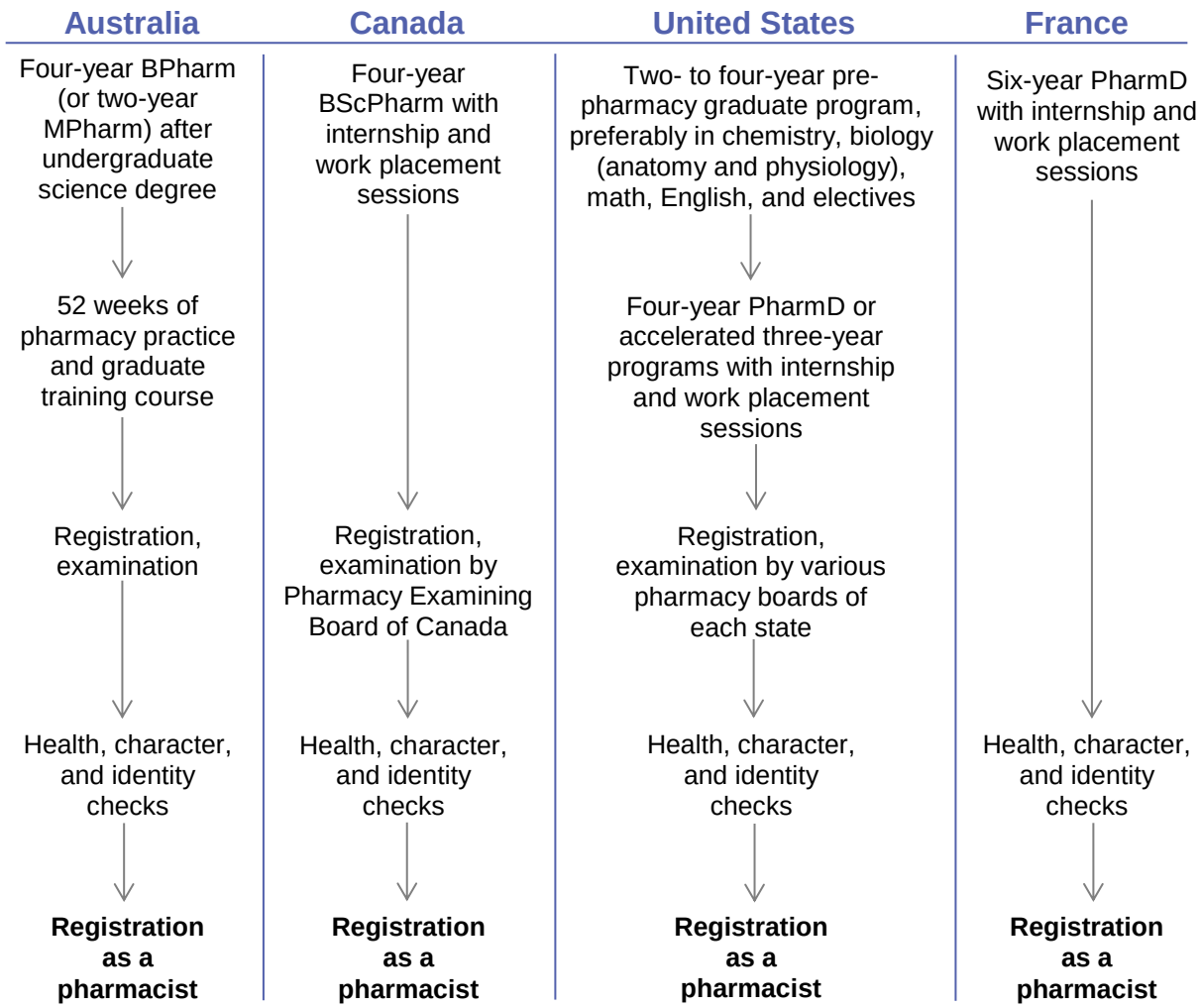

Figure 4. Initial education, training, and registration requirements for locally trained pharmacists in (left to right) Australia, Canada, the United States, and France[7,11,12]

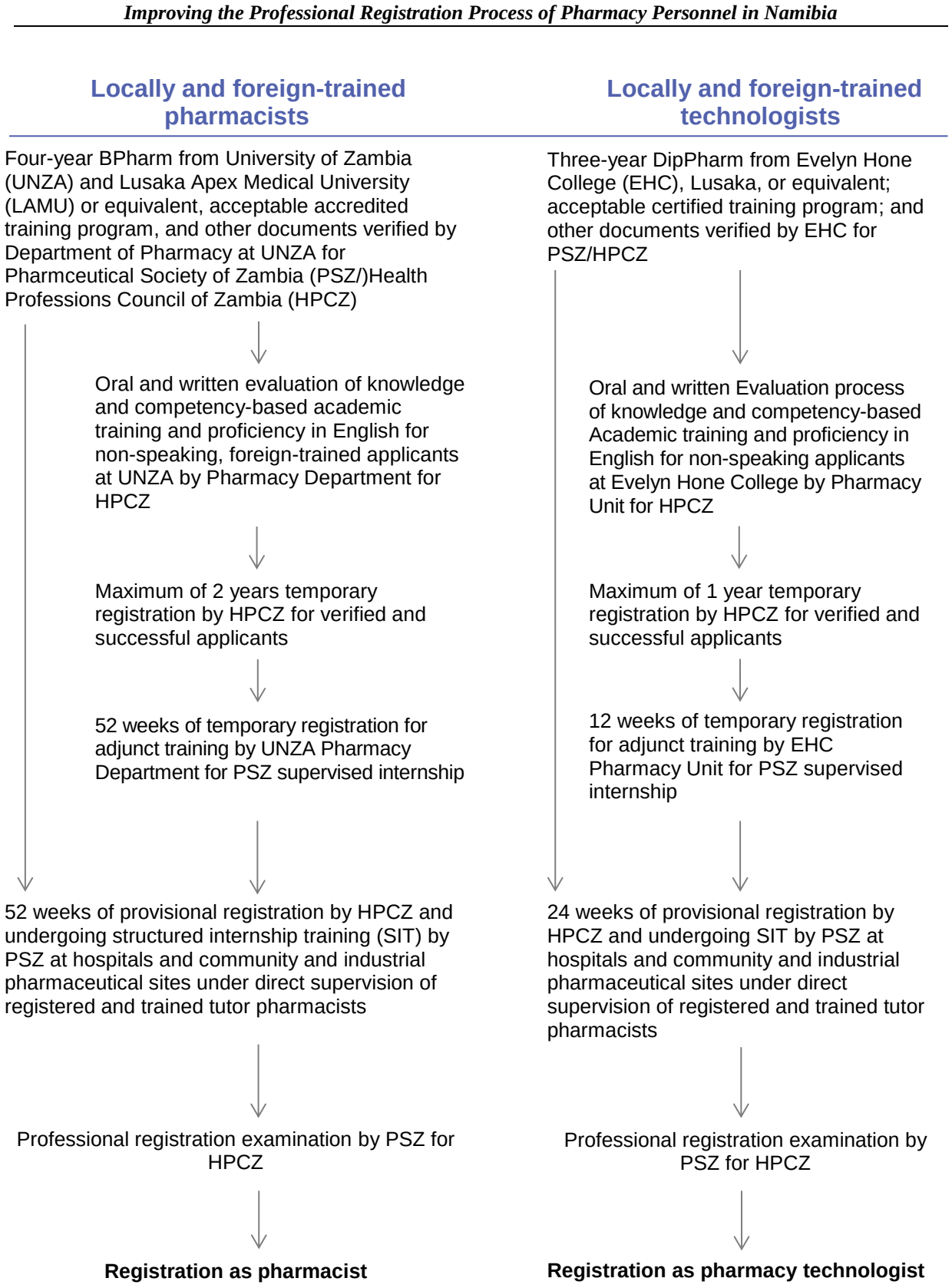

Figure 5. Zambian initial education, training, and registration requirements for (left) locally and foreign-trained pharmacists and (right) technologists[5,13]

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

- Training programs for the required types of pharmaceutical personnel have been established within the country (a degree program to train pharmacists and certificate program for PAs).

- Foreign-trained pharmaceutical practitioners continue to be recruited officially to practice in Namibia through the existing screening process, which may not contain national standard requirements.

- No process exists for harmonizing foreign training programs with national programs (adjunct training).

- Professional screening assessments of pharmaceutical practitioners are legally provided and impact potential applicants who wish to practice pharmacy in Namibia.

- An unstructured internship follows a successful screening assessment (no pre-registration training standards and type of professional examination).

- Professional mentors/tutors, though available, are not formally trained for this task.

Recommendations

- To link screening assessments with national training programs, pharmacists' knowledge and competencies should be assessed in relationship to the UNAM SOP program.

- PAs' training needs to be upgraded to the technician or technologist level to consolidate their teamwork with pharmacists at work places.

- National training guidelines such as pre-registration standards, adjunct training modules, and other relevant documents should be developed with the full participation of the program implementers.

- The teachers/trainers of tutors should be identified and trained prior to training the tutors.

- Training of tutors is a continuous process at appropriate and agreed-upon intervals.

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ANNEX A. SWOT ANALYSIS TO STREAMLINE PHARMACEUTICAL CARE SERVICE

Theme	Internal		External	
	Strengths	**Weaknesses**	**Opportunities**	**Threats**
Resources	Positive attitudes from stakeholders about strengthened pharmaceutical care system	Key stakeholders such as pharmaceutical society members are not legally bound to the legal system	The process requires all pharmaceutically trained personnel	Absence of regulations that accompanies the legal provision
Strategic planning	Within the Health Professions Council ranks is a request to streamline the care	Stakeholder involvement and accommodation of ideas from perceived private professional practitioners	Strong legal recognition and need for pharmaceutical care services in the country	Private and public groupings that exist within the ranks of pharmacy profession in the country
Regulation	PCN is established by an Act of Parliament in Namibia	There seem to be no accompanying regulations for this provision	With the law in effect, regulations can be formulated and effected	Formulation of a regulatory framework is not provided for within the Act
Visibility	Health Professions Council management has realized operational challenges to screening pharmaceutical practitioners and is seeking a solution	Current system seems to offer immediate concerns without reflecting on the long term, which may result in an inefficient national health system in general	Regulatory authority is part of solution, providing a process toward perceived problem	Situation analysis is not comprehensive and does not provide an optimal solution
Partnerships	Shared responsibilities for both intra- and inter-professional performance	Lack of health team operations discourages partnership	Legal provisions on health are a uniting factor and strongly encourage health team work	Professional differences among health disciplines sometimes harms well-intended teamwork
Systems Control	Pharmaceutical care as part of patient care is legally provided	It may not be appropriately regulated	Such a service system can be reviewed for strengthening	Not extensive in its application
Capacity development	UNAM program for teacher/tutor or TOTs training for professional development	Under-staffing at the institution may yield unwanted results	Existence of professional program in the country	Proper staffing levels for the program
Service delivery	Pharmaceutical care delivery strategies are provided	The process is not streamlined and inadequately resourced with personnel	Improve pharmaceutical service delivery and health care outcomes	Personnel involved are not appropriately oriented

ANNEX B. LIST OF STAKEHOLDERS INTERVIEWED AS PART OF THIS CONSULTANCY

Name	Title	Organization/Affiliation
Mr. Kennedy Kambyambya	Chief Pharmacist, National Medicines Policy Coordination	Division: Pharmaceutical Services, MoHSS
Dr. Timothy Rennie	Associate Dean, SOP	UNAM
Mr. Daniel Mavu	Lecturer, PA course	NHTC-MoHSS
Mr. Benjamin Khumalo	President	PSN
Mr. Paulus Mwandingi	Pharmacist	Community pharmacy, private sector
Mrs. Tangeni Angula	Pharmacist	
Ms. Mwape Kunda	Pharmacist	Katutura Health Centre, MoHSS
Ms. Winnet Murerwa	Pharmacist	Intermediate Hospital Katutura, MoHSS
Mr. Effort Chidzambwa	PA	Clinic, public sector, MoHSS
Mr. Cornelius Weyulu	Registrar	HPCNa
Mr. Crispin Mafwila	Deputy Registrar	
Ms. Melitta Elvira Mathe	Manager	PCN, HPCNa
Ms. Nardia Coetzee	Secretary, PSN	Education Committee, PCN
Dr. Timothy Rennie	Associate Dean, SOP, UNAM	
Mr. Evans Sagwa	Acting Country Project Director	SIAPS and SCMS
Mr. Greatjoy Mazibuko	Senior Technical Advisor	SIAPS