

نقابة صيادلة لبنان ORDER OF PHARMACISTS OF LEBANON

الإثنين في ٢٨ أيار ٢٠١٨

آلية التدرج في مهنة الصيدلة

# الأسباب الموجبة

١- تطوير وتحسين الاداء الصيدلاني في المنظومة الصحية

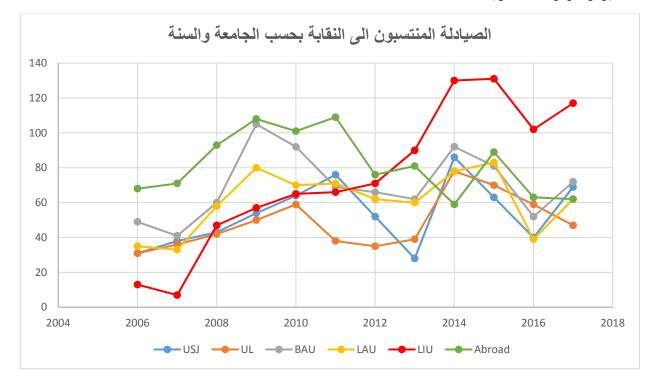
ان الاختصاصات الصيدلانية (صيدلة سريرية في المستشفى او في صيدلية خاصة، صيدلة صناعية...) تحتاج الى ست سنوات من دراسة الصيدلة قبل دخول الاختصاص، اذ ان التقدم العلمي عامةً والتقدم في العلوم الصيدلانية خاصةً قد جعل مدة الدراسة القصيرة (خمس سنوات مع التمرين ضمنا) غير كافية لما يتلائم مع الاختصاصات في الصيدلة والرعاية الصحية الجيدة، مما قد يؤثر على صحة المريض التي تعتبر اولوية في مهنة الصيدلة. هذا ما دفع بالعديد من الدول الغربية (الولايات المتحدة الأميركية، كندا، فرنسا، هولندا، اسبانيا، البرتغال، الشيلي...) والمجاورة (مصر، ايران...) برفع مدة در اسة الصيدلة الى ست سنوات وأعطاء لقب دكتور في الصيدلة لحاملي هذه الشهادة. اضافة الى ذلك، ان معظم المستشفيات في دول الخليج العربي لا تقبل صيادلة للعمل الا اذا أتموا الصيدلة إلا بعد القيام بتدرج تدريبي.

أما في لبنان، فيتخرج بعض الصيادلة بإثني عشر شهراً من التدريب الأكاديمي بنهاية السنة الخامسة من دون المرور بجميع أنواع التدريب المطلوبة لممارسة المهنة بشكل سليم، على سبيل المثال لا الحصر: التدريب في صيدلية مستشفى والتدريب السريري، وهذا ينطبق خاصةً على الصيادلة الوافدين من الخارج.

عطفاً على ذلك، إن الصيدلي بحاجة لمرحلة تأهيل لتخفيض الأخطاء الناتجة عن قلة الخبرة في إستعمال الدواء والتي قد ينتج عنها ضرر للمريض. لذلك على الصيدلي المتخرج حديثاً أن يكتسب خبرةً تخوله إستعمال الأدوات التي طورتها نقابة الصيادلة والتي من شأنها رفع مستوى المهنة ورعاية المريض من خلال خدمات متميزة تقدم في الصيدليات والمستشفيات وغيرها من المؤسسات الصيدلانية، بالإضافة إلى تطبيق خطة إدارة المخاطر الدوائية (Risk Management Plan) من خلال الوصفة الطبية الموحدة الالكترونية والباركود 2D عبر الانترنت، برنامج اليقظة الدوائية ونقص الادوية وغيرها من البرامج المطورة بالتعاون مع وزارة الصحة والتي تستدعي أن يكون الصيدلي قد أكمل دراسته وحصل على جميع المعلومات والمفاهيم المطلوبة لتطبيقها.

### ٢- تخفيض أعداد الخريجين

ينتسب إلى نقابة صيادلة لبنان أكثر من خمسمئة عضو جديد سنوياً من داخل وخارج لبنان، ما يتخطى بكثير الحاجة الوطنية (كما في الصورة أدناه). كما وأن عدد الصيدليات تجاوز ال٢٩٠٠ وهي النسبة الاعلى في العالم، الامر الذي يهدد المهنة ونوعية خدمتها، ناهيك عن الاخطار الصحية والاجتماعية التي قد تنجم عن المزاحمة غير المشروعة بمفهومها التجاري الواسع، فضلاً عن الصيادلة العاطلين عن العمل الذين يزداد عددهم سنة بعد سنة. كما وأن هذا التزايد العشوائي يهدد إستمرارية صندوق التقاعد الصيدلي إلى حد زواله في حال لم تتخذ التدابير والقرارات الجذرية المناسبة.



تفادياً لهذه المشاكل المتأتية من الأعداد الكبيرة والمتزايدة وتحسيناً لمستوى الخدمات الصيدلانية، ارسلت نقابة الصيادلة كتاباً لعمداء كليات الصيدلة في كافة الجامعات وطلبت منهم الإلتزام بعدد ٧٠ متخرج كحد أقصى لكل سنة در اسية، ولكن دون جدوى، اذ أن بعض الجامعات يصرّ على تخريج أعداد تفوق المئة كل عام. بعدها، طرحت النقابة عدة حلول خلال اجتماعات المجلس الأكاديمي (المكون من ممثلي كليات الصيدلة في لبنان إضافة الى أعضاء من الأعربي أعمان وطلبت منهم الإلتزام بعدد ٢٠ متخرج كحد أقصى لكل المتزايدة در اسية، ولكن دون جدوى، اذ أن بعض الجامعات يصرّ على تخريج أعداد تفوق المئة كل عام. بعدها، طرحت النقابة عدة حلول خلال اجتماعات المجلس الأكاديمي (المكون من ممثلي كليات الصيدلة في لبنان إضافة إلى أعضاء من اللجنة العلمية في النقابة) جوبهت بالرفض التام من قبل بعض الجامعات. من أهم الطروحات التي رفضت:

- زيادة عدد سنين الدراسة لتصبح ٦ سنوات اسوةً بالبلدان المتقدمة (الولايات المتحدة الأميركية، فرنسا، هولندا، اسبانيا، البرتغال، الشيلي...) وبعض وبلاد الجوار (مصر، ايران...) اذ ان مزاولة مهنة الصيدلة في لبنان تخضع الى القانون رقم ٣٦٧ الذي حدّد في بابه الاول شروط الترخيص لمزاولة المهنة على الاراضي اللبنانية دون تحديد مدة الدراسة. .....آلية التدرج في مهنة الصيدلة.....

- إعتماد حد أدنى للمعدل العام في البكالورية اللبنانية أو ما يعادلها كشرط لقبول الطالب في أي جامعة تدرس الصيدلة في لبنان أو كشرط لقبوله في النقابة.
- تمديد مدة التدريب خلال الدراسة لتصبح عشرين شهراً بدوام لا يقلّ عن ست ساعات يومياً فيكتسب
   الطالب المهارات المهنية المتنوعة والخبرة اللازمة للانخراط في العمل المهني بطريقة تضمن التخفيف
   من الاخطاء في الممارسة وتحافظ على صحة المريض ومصلحة الصيدلي معاً.
- القيام بمباراة وطنية Concours National تنظمه وزارة التربية بالتعاون مع الجامعات اللبنانية المرخص لها ونقابة الصيادلة لتحديد الأعداد بحسب حاجة البلاد (Numerus clausus).
- طرح الإلتزام بعدد خريجين يتفق عليه بين العمداء والنقابة (Gentlemen's agreement) خلال إجتماع في وزارة التربية والتعليم العالي بحضور مدير عام التعليم العالي الدكتور أحمد الجمال ومستشار وزير التربية وعضو مجلس شورى الدولة القاضي سميح مداح.

بناء على ما تقدم،

كان لا بد من اعتماد مبدأ تحديد اعداد خريجي الصيدلة كما هو معتمد في البلدان المتقدمة بما يتناسب مع حاجة البلاد والتطور العلمي والاجتماعي وذلك من خلال تطبيق نظام التدرج في نهاية السنة الجامعية الخامسة على جميع الطلاب الذين ينتسبون الى كليات الصيدلة في لبنان والخارج، كشرط لمز اولة مهنة الصيدلة على الاراضي اللبنانية، مما ينعكس إيجابا على الصيدلي والمريض على حد سواء ويرفع مستوى العناية الطبية والصيدلانية في لبنان ويخفف من أعداد الطلاب في الجامعات ويحسن من مستواهم.

# مضمون القرار

في جلسته المنعقدة في تاريخ ٥٥-٣-٢٠١٨ التخذ مجلس نقابة صيادلة لبنان قراراً تاريخياً تمثل بإقرار نظام التدرج للصيادلة. بموجب هذا القرار يتوجب على الطالب المسجل حالياً في الجامعة والذي سينتسب الى نقابة الصيادلة ابتداءَ من ٢٠١٩ إجراء تدرج لمدة ٩ اشهر، وذلك بعد التسجيل في النقابة كمتدرج. ويمكن استبدال مدة التدرج بشهادة PharmD أو بدراسة سنة تخصص إضافية في أي من المواد المتعلقة بإختصاص الصيدلة التي تكسبه خبرةً في مجال عمله المرتقب، مثالاً لا حصراً: Research or Professional Master. أما الطالب الذي سيتسجل في الجامعة في السنة الأولى اعتبارا من السنة الدراسية ٢٠١٩ فسيتوجب عليه أبرا الطالب الذي سيتسجل في الجامعة في السنة الأولى اعتبارا من السنة الدراسية ٢٠١٩-٢٠١ فسيتوجب عليه في النقابة لتحديد مدة الاعفاء. يسري هذا القرار على الطلاب الوافدين من الجامعات اللبنانية ومن الخارج. في النقابة لتحديد مدة الاعفاء. يسري هذا القرار على الطلاب الوافدين من الجامعات اللبنانية ومن الخارج. في ظل أزمة تكاثر الصيادلة وضيق مهالات العمل.

# آلية التدرج

- يتخرج طالب الصيدلة من الجامعة، يعادل شهادته في وزارة التربية والتعليم العالي، ويحصل على إذن مزاولة مهنة الصيدلة من وزارة الصحة العامة
- يتسجل في النقابة كصيدلي متدرج بناءً على القرار أعلاه، وبحسب عدد سنين الدراسة التي اتمها، تحتسب له مدة التدرج
- يتم التدرج بحسب الجدول المرفق لاحقاً على أن يقيم عمل المتدرج لقبوله لاحقاً كصيدلي منتسب إلى النقابة
  - عند إنتهاء مدة التدرج بنجاح، ينتسب المتدرج للنقابة كصيدلي
- ان جميع النشاطات سوف تتم بالتعاون مع وزارة الصحة العامة وبحسب دليل مفصّل من قبل نقابة الصيدلة



نقابـة صيادلـة لبنـان ORDER OF PHARMACISTS OF LEBANON

May 28, 2018

## **POST-GRADUATE TRAINING PROGRAM** COMPETENCIES AND REQUIRED ACTIVITIES

#### BACKGROUND

This document encloses the list of minimum mandatory activities that are expected to lead to the required competencies for all pharmacists registered at the OPL. It also includes appendices related to specific trainings. It is required to all graduates registered at the OPL as post-graduate trainees (صيدلي متدرج)

#### **CORE TRAINING**

COLL HAIMIN					
<b>Duration</b> :	9 months				
Sites:	Community and/or Hospital Pharmacy				
Candidates:	All newly registered pharmacists at the OPL starting 2019				
Pre-requisite:	An official academic portfolio (certified by the university) including all				
	acquired competencies and activities during the university trainings				
<b>Deliverable:</b>	A self-constructed portfolio where the candidate shows his acquirement of the				
	competencies and all conducted activities				
Outcome:	me: Core training certificate delivered by an academic institution and/or OPL				
• The core training is mandatory to all BS Pharm graduates who are required to complete					
these activi	these activities as per the tables hereafter.				
Graduates	• Graduates with a PharmD or a Master degree will have to present an official proof of				

- Graduates with a PharmD or a Master degree will have to present an official proof of completion of these activities to be exempted from the core training.
- Holders of degrees requiring 3+ years post-graduation (PhD, Medical lab...) are exempted

SPECIFIC TRAI	NINGS	
<b>Duration</b> :	11 months	
Sites:	Specific according to specialty	
<b>Candidates</b> :	All newly registered pharmacists at the OPL starting 2024	
Pre-requisite:	Core Training Certificate	
<b>Deliverable:</b>	A self-constructed portfolio where the candidate shows his acquirement of the	
	competencies and all conducted activities	
Outcome:	Specific training certificate delivered by an academic institution and/or OPL	
• Specific training-related competencies are enclosed as appendices at the end of this		

- Specific training-related competencies are enclosed as appendices at the end of this document.
- The training institution will decide which activities might lead to the required competencies
- Holders of degrees requiring 3+ years post-graduation (PhD, Medical lab...) are exempted

Area/Competence	Indicators	Dogwinged Activity
Area/Competency  1. Professional Practice  1.5 Continuing Professional Development (CPD)  Applies principles of continuing professional development including assessing own learning needs and developing a plan to meet these needs	Indicators 1.5.1 Understands and accepts the importance of life-long learning for pharmacists 1.5.2 Demonstrates the ability to critically reflect on their own practice and skills to identify learning and development needs 1.5.3 Takes personal responsibility for engaging in CPD and achieving learning and professional development goals 1.5.4 Undertakes appropriate learning activities that meet identified learning needs 1.5.5 Keeps knowledge and skills up to date 1.5.6 Commits to the continual	Required Activity- Has to complete the required 15annual CE credits of which 5 (five) atleast must be live- Creates all the needed accounts tobe able to start the CE program- Starts doing online sessions usingSwank healthcare system- Starts attending OPL CE activities,such as CE program sessions, theannual congress and pharmacist day Attends other live sessions offeredby academic institutions or accreditedby the OPL Completes evaluation forms that arerequired by the OPL- Should present a statement ofaccount from Swank with the detailed
2. Personal Skills	<ul><li>1.5.6 Commits to the continual improvement of the profession</li><li>2.1.1 Applies assertiveness skills as</li></ul>	<ul><li>account from Swank with the detailed credits earned.</li><li>Attends soft skills sessions organized</li></ul>
2.1 Leadership Skills Demonstrates leadership abilities in the team processes.	appropriate and inspires confidence 2.1.2 Provides leadership in the workplace to ensure quality and patient safety in the pharmacy 2.1.3 Builds credibility and portrays the profession in a positive light by being professional and well informed 2.1.4 Demonstrates determination and initiative to achieve and improve patients' service 2.1.5 Inspires and motivates others to work to high standards by being enthusiastic about the profession and the service provided 2.1.6 Provides appropriate supervision 2.1.7 Identifies characteristics that reflect leadership versus management 2.1.8 Identifies the history of a team before implementing changes 2.1.9 Develops relationships, values diverse opinions, and understand individual strengths and weaknesses to promote teamwork 2.1.10 Persuasively communicates goals to the team to help build consensus 2.1.11 Empowers team members by actively listening, gathering input or feedback, and fostering collaboration.	by the OPL or any other academic institution - Participates to workshops and related discussions organized by the OPL or any other academic institution - Participates to all OPL initiatives that are related to patient services and collaboration with other health care professionals. - Helps junior trainees fulfilling their own assigned training activities - Minimum required: 5 credits

### GENERAL COMPETENCIES AND REQUIRED ACTIVITIES

<ul> <li>2. Personal Skills</li> <li>2.5 Information Technology (IT) Skills</li> <li>Applies a minimum of IT in daily work</li> <li>4. Safe and Rational Use of Medicines</li> <li>4.3 Monitors medicines use</li> <li>Monitors the patient's progress and assess</li> </ul>	<ul> <li>2.5.4 Knows how to use OPL online platforms (Medication Safety, Patient Profile) related to the training site.</li> <li>4.3.6 Enters all relevant data collected in the OPL Advanced Patient Profile Platform</li> </ul>	<ul> <li>Uses OPL online platforms, as requested by the OPL in training sites: <ul> <li>E-prescription &amp; Barcoding,</li> <li>Drug Shortage</li> <li>Lebanese Advanced Patient Profile</li> </ul> </li> <li>Minimum required: 1 activity of each per week</li> <li>Enters all relevant data collected in the OPL Advanced Patient Profile Platform</li> <li>Provides the patient with adequate counseling.</li> <li>Minimum required: 1 intervention per week</li> </ul>
therapeutic outcomes 4. Safe and Rational Use of Medicines 4.4 Monitors Medication Safety Prioritizes medication safety and acts accordingly	<ul> <li>4.4.1 Identifies medication safety as a priority</li> <li>4.4.2 Maintains a reporting system of pharmacovigilance using the OPL Medication Safety Platform</li> <li>4.4.3 Encourages patients to be knowledgeable about their medication</li> <li>4.4.4 Document and act upon dispensing errors</li> <li>4.4.5 Implement and maintain a dispensing error reporting system and a 'near misses' reporting system</li> <li>4.4.6 Implements and manages risk management to avoid adverse events with medication</li> <li>4.4.7 Documents and acts upon errors to include clear and open communication with patients</li> <li>4.4.8 Learns from and acts upon previous 'near misses' and 'dispensing errors'</li> <li>4.4.10 Identifies, prioritizes and resolves medicines management problems</li> <li>4.4.11 Takes action to prevent, minimize, resolve and follows up medicines related problems</li> <li>4.4.12 Takes steps to improve the safe use of medicines for patients in all practice settings.</li> </ul>	<ul> <li>Enters all relevant data collected in the OPL Platforms related to safety:</li> <li>Medication Safety platform</li> <li>Medication error reporting)</li> <li>Minimum required: 1 intervention of each per week</li> </ul>
<ul> <li>5. Pharmaceutical</li> <li>Public Health</li> <li>Competencies</li> <li>5.1 Population Health</li> <li>Engages in health</li> <li>promotion activities</li> <li>with the patient</li> </ul>	5.1.6 Engages in research related to health care and population health	<ul> <li>Helps the OPL in conducting professional, institutional and patient related research by filling out questionnaires and collecting data.</li> <li>Minimum required: as needed by OPL</li> </ul>

Specific areas of training	Specific indicators to training sites (see appendices)	- Hospital Pharmacy management
Applies knowledge to specific training sites		<ul> <li>Marketing plan generation and application</li> <li>Quality control application (industry)</li> <li>Other activities</li> </ul>

Area	Competency		Indicators
0 Fundamental Skills	0.1 Legal Considerations	0.1.1	Apply laws and regulations that impact acy practice
		0.1.2	Identify issues, pending legislation and
	0 2 Due du et	-	
0 Fundamental Skills	0.2 Product	0.2.1	Select and acquire products through
	Procurement	0.2.2	appropriate supply chain
		0.2.2	Anticipate, identify and troubleshoot problems with the supply chain
		0.2.3	Manage inventory
0 Fundamental Skills	0.3 Compounding	0.3.1	Compound extemporaneous preparations
o i unuamentai skiiis	0.5 compounding	0.3.2	Perform basic, non-sterile compounding
0 Fundamental Skills	0.4 Pharmacy	0.4.1	Apply typical pharmacy dispensing workflow
o i unuanientai skiiis	Operation	0.4.2	Comprehend and adopt a given set of pharmacy
		••••	operating procedures
		0.4.3	Comprehend and adopt an existing
			collaborative drug therapy management system
		0.4.4	Evaluate prescription for legitimate medical use
		0.4.5	Describe the roles and responsibilities of each
			pharmacy staff member
		0.4.6	Implement dispensing processes when
			pharmacy automation is utilized
0 Fundamental Skills	0.5 Quality	0.5.1	Optimize the concepts of quality measurement
	Improvement		and improvement
		0.5.2	Apply national standards/guidelines/best
			practices
		0.5.3	Develop a plan for quality/performance
			improvement
0 Fundamental Skills	0.6 Pharmacy	0.6.1	Describe the role of computerized pharmacy
	Automation		management systems in dispensing
		0.6.2	Dispense prescriptions utilizing technology- assisted workflow when applicable
1 Safe and Rational	1.1 Clinical skills	1.1.1	Demonstrate and routinely apply clinical skills
Use of Medicines			and provide patient care services
		1.1.2	Individualize therapy through the
			implementation of a patient's profile to the
			selection and modification of a medication
			regimen
		1.1.3	Describe and apply clinical practice guidelines to patient care
		1.1.4	Demonstrate knowledge of appropriate
			administration technique for dosage forms
			commonly dispensed in community pharmacy
		1.1.5	Describe common doses of drugs requiring
			monitoring and collaborative drug therapy
			management
		1.1.6	Proactively perform counseling and education
			which complies with current guidelines
1 Safe and Rational	1.2 Medication Therapy	1.2.1	Define and appropriately document
Use of Medicines	Management		comprehensive MTM services

# Appendix 1: Community/Ambulatory Care Pharmacists Minimal Competencies

	[		<u> </u>
		1.2.2	Conduct a patient interview and provide education
		1.2.3	Conduct comprehensive medication review
		1.2.4	Identify and resolve medication therapy problems, manage drug interactions, and resolve gaps in care
		1.2.5	Recommend therapeutic alternatives and generic substitutions
		1.2.6	Document services and follow-up with other
			health professionals
		1.2.7	Use multiple MTM platforms as required by third party payers and OPL
1. Safe and Rational	1.3.Compliance and	1.3.1	Support and assist patient behavior change
Use of Medicines	Adherence	1.3.2	Identify and resolve patient-specific barriers to medication adherence
		1.3.3	Facilitate patient self-administration of
			medications and disease monitoring
1 Safe and Rational Use of Medicines	1.4 Problem solving/ Referrals	1.4.1	Make appropriate recommendations or referrals
		1.4.2	Assess and resolve issues related to medication safety
1 Safe and Rational	1.5 Over the counter	1.5.1	Assist with patient self-care, including helping
Use of Medicines	Medicine		patients make appropriate selections of OTC medications
		1.5.2	Assist with patient self-care, including helping
			patients make appropriate selections of dietary
		4 5 3	supplements
		1.5.3	Assist with patient self-care, including helping patients make appropriate selections of herbal
			supplements
2 Pharmacy Management	2.1 Functions	2.1.1	Manage inventory costs and inventory levels or order points
		2.1.2	Identify cash flow problems and apply solutions to address
		2.1.3	Develop a business plan for clinical service programs
		2.1.4	Describe basic finance terms and analyze a financial statement
		2.1.5	Apply healthcare economics and pharmaco- economics
		2.1.6	Describe strategies for asset protection and safety
		2.1.7	Use pharmacy technology effectively
2 Pharmacy	2.2 Managed care	2.2.1	Explain the general concept of managed care,
Management	/Drug Coverage Policies		associated with the benefit structure of a health plan
		2.2.2	Adapt best treatment strategies to patient
			socioeconomic status
		2.2.3	Provide guidance to patients seeking assistance
			to apply for drug payment programs
		2.2.4	Troubleshoot denied claims

		225	Discuss the concept of drug utilization review
		2.2.5	Discuss the concept of drug utilization review, formulary management and provide functional
			definitions of key managed care strategies (e.g.,
			prior authorizations, step therapy, quantity
			limits)
		2.2.6	Identify major factors that contribute to
			prescription drug related fraud and abuse
		2.2.7	Identify the major factors influencing drug costs
			for a managed care organization (e.g., pharmacy
			costs, drug pricing methodologies,
			contracts/rebates, discounts)
3 Professional Skills	<b>3.1</b> Health Literacy	3.1.1	Determine patient level of health literacy by observation or interview,
		3.1.2	-
		5.1.2	Adjust counseling delivery and communicate at all levels of health literacy
		3.1.3	Solve adherence challenges created by low
			health literacy
3 Professional Skills	3.2 Patient	3.2.1	Support patient behavior change through skills
	communication		such as motivational interviewing
		3.2.2	Demonstrate a respect for patient
		3.2.3	confidentiality and privacy rights
3 Professional Skills	<b>3.3</b> Health	3.3.1	Demonstrate patient compassion and empathy Function as part of a team engaged in team-
5 PTUIESSIUIIdi SKIIIS	professional	5.5.1	based care
	communication	3.3.2	Document appropriate therapeutic
	communication	5.5.2	recommendations related to medication
			therapy
3 Professional Skills	3.4 team	3.4.1	Identify and manage conflict at all levels
	communication	3.4.2	Supervise and motivate employees, staff,
			students, interns, residents
		3.4.3	Delegate appropriate tasks
		3.4.4	Articulate team objectives and measure and
			report team performance
3 Professional Skills	3.5 Leadership	3.5.1	Display confidence in the patient care skills
	Abilities	3.5.2	Demonstrate professional behavior (attitude, dress, appearance, etc.) in practice settings
		3.5.3	Embrace and advocate changes that improve
			patient care
3 Professional Skills	3.6 Drug information	3.6.1	Access and utilize appropriate drug information
	skills		resources and provide an accurate and credible
			solution in both written and oral forms
		3.6.2	Utilize a variety of drug-related reports,
			monographs, reviews and policies using drug
			literature evaluation skills
		3.6.3	Evaluate appropriateness of clinical trials and
			other study designs, including validation of
			methodology and assessment of data credibility
		3.6.4	Access appropriate drug information resources
			required for patient education
		3.6.5	Implement career advancement through
			continuous professional development

3 P	rofessional Skills	3.7 Ethical Considerations	3.7.1	Understand professional ethics as they apply to the practice of pharmacy
			3.7.2	Apply knowledge and understanding of ethical aspects of pharmacy practice required to evaluate a patient care decision
4	Public health Fundamentals	<b>4.1</b> Clinical Applications of Public Health	4.1.1	Participate in education and intervention in public health initiatives applicable to pharmacy practice
			4.1.2	Be knowledgeable about immunization schedules and requirements and actively involved in vaccination campaigns
			4.1.3	Collect, interpret, and make recommendations based on the results of health and wellness screenings and diagnostic tests
			4.1.4	Promote healthy lifestyle and nutrition and describe how it impacts drug therapy and overall health
			4.1.5	Describe the role of a pharmacist in emergency situations
			4.1.6	Participate in population-based provision of care (as distinguished from direct patient care).

Area	Competency		Indicators
0 Fundamental Skills	0.1 Regulations	0.1.1	Apply pharmaceutical statutory regulations
		0.1.2	Apply hospital regulations pertaining to the
			operations of the hospital pharmacy
0 Fundamental Skills	0.2 Drug Procurement	0.2.1	Select and acquire drug selection and
			acquisition
		0.2.2	Manage drug inventory management
		0.2.3	Manage backorders and recalls
		0.2.4	Handle drug waste
		0.2.5	Handle drug shortages
0 Fundamental Skills	0.3 Medication Preparation and Delivery	0.3.1	Optimize the medication use process in health systems, including how pharmacy impacts the safety of storage/preservation, prescribing, preparation, transcription, dispensing, administration and monitoring
			steps
		0.3.2	Perform activities within a typical hospital drug distribution system, including order receipt, evaluation and review, and describe the appropriate roles of pharmacy staff and pharmacists in these processes
		0.3.3	Supervise pharmacy staff in their work in medication preparation and delivery
0 Fundamental Skills	<b>0.4</b> Aseptic Techniques	0.4.1	Follow aseptic technique and describe processes and facilities needed to provide sterile compounded parenteral solutions, including the basic requirements of hospital accreditation standards
		0.4.2	Apply knowledge of hospital hygiene and infection prevention control (IPC).
0 Fundamental Skills	Hospital Technology/ Automation	0.5.1	Outline the basic functionality of commonly used automated systems related to medication use (such as automated dispensing cabinets, computerized prescriber order entry systems, bar code medication administration systems, programmable infusion devices, and robotics) Understand their appropriate and safe use as well as unintended consequences
0 Fundamental Skills	0.6 Pharmaceutical/ Medical Skills	0.6.1	Implement the appropriate use of injectable medications, including intravenous, intrathecal, intraocular, intradermal and other routes. Description should include unique preparation techniques, concentration considerations, rates of administration, special infusion devices, and compatibility considerations
		0.0.2	Integrate and interface the clinical and distributive functions, including the synergy

### **Appendix 2: Hospital Pharmacists Minimal Competencies**

			that translates into safe and effective medication therapy
		0.6.3	Participate in designing and implementing pharmaceutical/therapeutic protocols and algorithms
		0.6.4	Integrate of pharmaceutical oncology, nutrition and other fields when applicable
		0.6.5	Demonstrate knowledge of pharmaceutical radiotherapy: therapeutic and diagnostic
			applications (e.g. contrasts) when applicable
		0.6.6	Describe the use of medical devices, prostheses and implants when applicable
0 Fundamental Skills	0.7 Business Management	0.7.1	Perform accounting activities
	Skills	0.7.2	Perform financial management
		0.7.3	Set budgeting proposals/plans
1 Safe and Rational Use of Medicines	1.2 Patient Safety	1.2.1	Understand patient safety culture that relates to medication use, pharmaceutical care and pharmacy's role
		1.2.2	Reconcile effectively the medications of a patient transitioning from one care setting to another and make appropriate communications to involved pharmacy providers
		1.2.3	Employ performance improvement techniques used in health systems and describe how they are used to improve the medication use process
		1.2.4	Describe the impact of pharmacist involvement on medication safety and quality using appropriate literature
		1.2.5	Develop and implement pharmacovigilance activities
1 Safe and Rational Use of Medicines	<b>1.3</b> Quality Assurance	1.3.1	Describe how the accreditation organizations such as the Joint Commission strive to assure quality of healthcare through the accreditation process, giving examples of relevant standards related to safe and appropriate medication use
		1.3.2	Apply national standards, guidelines, best practices and established principles and process related to quality and safe medication use (e.g. storage of look- alike/sound-alike medications, high alert medications, storage of concentrated potassium in patient care areas, dangerous abbreviations, leading decimal points and trailing zeros, quality measure related to medications, etc.)
2 Patient Centered	2.1 Literature Evaluation	2.1.1	Access appropriate drug information
Care	/Search / Trials	2.1.2	resources, including primary literature
	1	2.1.2	Analyze a recently published study

[]		2.1.3	Provide an accurate and evidence based
		2.1.3	answer
		2.1.4	Present the answer successfully in both
			written and oral forms
		2.1.5	implement methodologies for clinical trials
			and observational studies
2 Patient Centered	2.2 Pharmacokinetic Based	2.2.1	List the medications that need
Care	Assessment		pharmacokinetic evaluation
		2.2.2	Apply dosing principle
		2.2.3	Evaluate drug-response and monitor patients
		2.2.4	Evaluate medication-use patterns in a
2 Dations Contained		224	specified patient population
2 Patient Centered	<b>2.3</b> Drug Use Optimization	2.3.1	Demonstrate an appropriate level of clinical
Care			knowledge related to medications and
			therapeutics in making decisions or recommendations
		2.3.2	Contribute to the establishment of
		2.3.2	medication use policies, including anti-
			microbial stewardship, criteria and
			maintenance of the formulary as a member
			of the Pharmacy and Therapeutics
			Committee
		2.3.3	Provide quality care through best use of
			resources
		2.3.4	Draft and distribute information and
			recommendations related to the clinical use
			of drugs when appropriate
		2.3.5	Optimize use of drugs including: addition,
			deletion, dose adjustment, IV to Po switch,
			renal dosing, dose reduction
3 Professional Skills	3.1 Written and Oral	3.1.1	Demonstrate effective verbal and written
	Communication		communications
		3.1.2	Communicate with pharmacy, and
			healthcare team members
		3.1.3	Respond to questions with the appropriate
			level of detail necessary to ensure proper
			patient care and communication with other
		214	relevant parties
		3.1.4	Document appropriate therapeutic recommendations related to medication
3 Professional Skills	3.2 Behavior & Ethical	3.2.1	therapy Demonstrate professional behavior (attitude,
		3.2.1	dress, appearance, etc.) in practice settings
		3.2.2	Apply ethical principles
3 Professional Skills	3.3 Management	3.3.1	Demonstrate project and team management
5 TTORESSIONAL SKIIIS	5.5 Management	5.5.1	skills
		3.3.2	
		3.3.2	Prioritize multiple patient care and triage in times of high activity and workload

Are	a	Competency	Indicators
0.	Pharmaceutical	0.1 Pharmaceutical	0.1.1 Provide information on drugs/products and
	Knowledge	knowledge	services 0.1.2 Answer questions of healthcare professionals on drugs/products and services (characteristics, contraindications, incremental benefits, etc.), as part of a comprehensive care of patients 0.1.3 Provide information and answer questions as part of therapeutic regimens associated with a pathology linked to the concerned drugs 0.1.4 Link scientific and medical knowledge to drug/product arguments 0.1.4 Exchange with healthcare professionals on scientific topics
1.	Professional	1.1 Communication	1.1.1 Explain the characteristics and the proper use
	communication skills		of drugs/products based on the needs of the healthcare professionals and market demands 1.1.2 Take ownership of the content of the information prepared by the scientists responsible of the pharmaceutical company 1.1.3 Use the information, arguments, business aids developed by the pharmaceutical company 1.1.4 Maintain and develop product knowledge through training
1	Professional communication skills	1.2 Data processing analysis skills	<ul> <li>1.2.1 Collect and process of information on drugs/products, from documentation and training sessions to prepare for visits and communication actions</li> <li>1.2.2 Collect, analyze and transmit questions to the concerned departments of the company</li> <li>1.2.3 Collect and transmit pharmacovigilance information</li> <li>1.2.4 Apply competitive intelligence and report information to its hierarchy</li> <li>1.2.5 Monitor actions and professional communication during visits</li> </ul>
1	Professional communication skills	1.3 Negotiation	<ul> <li>1.3.1 Establish a quality relationship with healthcare professionals</li> <li>1.3.2 Identify/address the healthcare professionals' concerns/needs and their patient care practices by using appropriate probing/questioning</li> <li>1.3.3 Apply active listening techniques with the healthcare professional.</li> <li>1.3.4 Adapt to different communication styles</li> <li>1.3.5 Process requests for information and objections</li> <li>1.3.6 Conclude the call/visit &amp; Prepare reports</li> <li>1.3.7 Analyze the call/visit (SWOT analysis) and plan the next step</li> <li>1.3.8 Animate professional communication gatherings and develop long-term professional</li> </ul>

# Appendix 3: Sales and Marketing Pharmacists Minimal Competencies

			relationships/partnership with healthcare
			professionals
1.	Professional		1.4.1 Save and transmit calls/visits reports to the
	communication skills	1.4 Information	company database
		technology	1.4.2 Inform and update files
			1.4.3 Master research of information via electronic databases.
			1.4.4 Optimize the use of computerized/electronic
			devices to prepare presentations, reports, charts,
			etc, and manage business and information
			processing
			1.4.5 Manage of prescribers/customers files
1	Professional	1.5 communication	1.5.1 Use effective verbal, non-verbal, listening and
	communication skills	and language	written communication skills to communicate
			clearly, precisely and appropriately
			1.5.2 Communicate effectively with physicians,
			other healthcare professionals, other support staff,
			and other relevant third parties
			1.5.3 Use appropriate language and checks
			understanding 1.5.4 Demonstrate respect, cultural awareness,
			sensitivity and empathy when communicating
2	Organization and	2.1 Self-management	2.1.1 Demonstrate organization and efficiency in
<b>–</b>	management skills	skills	carrying out
			the work
			2.1.2 Organize visits according to the predefined
			objectives and through teamwork
			2.1.3 Ensure work time and processes are
			appropriately planned and managed
			2.1.4 Demonstrate the ability to prioritize work
			appropriately
			2.1.5 Take responsibility as appropriate in the
			workplace 2.1.6 Ensure punctuality and reliability
			2.1.7 Reflect on and demonstrate learning from
			critical incidents
2.	Organization and	2.2 Internal	2.2.1 Demonstrate an understanding of the
	management skills	management skills	principles of organization and management
			2.2.2 Work effectively with the documented
			procedures and policies within the workplace
			2.2.3 Work effectively with the company hierarchy
			2.2.4 Provide regular feedback on the
			drugs/products and the market
			2.2.5 Convey any useful information from the market with all the company's concerned
			people/departments (medical representatives,
			direct manager, product manager, medical
			manager, medical science liaison, CRA)
			2.2.6 Apply the company's compliance, procedures
			and safety rules (road, IT, etc)
			2.2.7 Organize round tables, expert meetings,
			advisory boards, lectures, CME conferences, staff
			meetings, awareness campaigns, etc. in

			coordination with different departments within the
			company and service providers
			2.2.8 Apply the international code of ethics
			guidelines when organizing any of the scientific
			events mentioned above
3.	Professional practice	3.1 Standard Practice	3.1.1 Carry out duties as a medical representative
			in a professional manner
			3.1.2 Demonstrate awareness of the position of
			trust in which the profession is held and practices
			in a manner that upholds that trust
			3.1.3 Treat others with sensitivity, empathy,
			respect and dignity
			3.1.4 Take responsibility for their own actions
			3.1.5 Recognize their scope of practice and the
			extent of their current competency and expertise
			and works accordingly
			3.1.6Maintain a consistently high standard of work
3	Professional practice	3.2 Ethical Practice	3.2.1 Understand obligations under the principles
3	Fioressional practice	J.Z Ethical Flactice	of the statutory Code of Conduct for Pharmacists
			and acts accordingly
			3.2.2 Make and justify decisions in a manner that
			reflects the statutory Code of Conduct for
			-
			pharmacists and pharmacy law
			3.2.3 Recognize ethical dilemmas in practice
			scenarios and reasons through dilemmas in a
			structured manner
			3.2.4 Implement standard operating procedures
			and code of ethics
3	Professional practice	3.3 Legal Practice	3.3.1 Demonstrate an awareness of and adheres to
			professional
			indemnity requirements
			3.3.2 Use and take into account the drug related
			pharmaceutical and economic regulation and its
			evolution to inform and answer questions from
			healthcare professionals
			3.3.3 Integrate into business the rules of
			advertising, promotion, distribution and delivery of
			the drug and their changes
			3.3.4 Raise awareness and provide information on
			regulatory changes
			3.3.5 Use tools related to the product (SPC, product
			file, Transparency Commission opinion, validated
			data, etc.)
			3.3.6 Drive up pharmacovigilance information by
			following the internal procedures and regulations
4	Personal skills	4.1 Role Modeling	4.1.1 Inspire confidence and applies assertiveness
			skills as appropriate
			4.1.2 Build credibility and portrays the profession in
			a positive light by being professional and well
			informed
			4.1.3 Contribute to the initiation, development and
			continuous improvement of business plans
4	Personal skills	4.2 Team working	4.2.1 Recognize the value of transversal teamwork
		skills	
		JILIIJ	

4.2.3 Recognize when it is appropriate to seek advice from experienced colleagues, refer decisions
to a higher level of authority or to include other colleagues in the decision

Are	а	Competency	Indicators
0	Research and	0.1 Process	0.1.1 Identify the different phases of a research
	Development	implementation	process
			0.1.2 Integrate the input requirements and
			objectives of the process
0	Research and	0.2 Mastering	0.2.1 Implement experimental conditions for
	Development	analytical and	synthesizing a chemical entity
	•	extraction techniques	0.2.2 Use a technique for extraction and
			purification of a natural origin molecule
			0.2.3 Use a technique for gene expression
0	Research and	0.3 Mastering	0.3.1 Use molecule characterization techniques
-	Development	characterization	(separation techniques, spectroscopic
		techniques	techniques, capillary electrophoresis)
			0.3.2 Implement experimentation protocols to
			characterize the interaction target-molecules
			0.3.3 Design and validate a technique for
			obtaining or characterization of a molecule
			0.3.4 Organize a scientific monitoring process
1	Pharmaceutical and	1.1 Drug formulation	1.1.1 Use the established physicochemical
-	Industrial development	expertise	characteristics of active molecules by using
		capertice	appropriate analytical techniques (X-ray
			diffraction, solubility, etc.)
			1.1.2 Develop formulations and routes of
			administration (including controlled of modified
			release systems) according to the
			characteristics of the molecules and the
			marketing objectives
			1.1.3 Set a process to optimize a formulation
			1.1.4 Remain up to date with and applies
			pharmaceutical knowledge on the requirements
			of formulating and compounding of medicines
			1.1.5 Demonstrate the ability to perform
			pharmaceutical calculations accurately
			1.1.6 Apply pharmaceutical knowledge to select
			appropriate ingredients and excipients of the
			required quality standard for the manufacture
			and compounding of medicines
			1.1.7 Demonstrate an understanding of the
			legislative framework and requirements that
			govern the manufacture of medicinal products,
			including GMP
1	Pharmaceutical and	1.2 Packaging	1.2.1 Develop packaging characteristics from
	Industrial development	expertise	the properties of the molecules and the
			developed dosage form
			1.2.2 Elaborate packaging characteristics
			according to container-content interactions and
			physicochemical stability

### Appendix 4: Industrial Pharmacists Minimum Competencies

1	Pharmaceutical and	1.3 Industrial scale	1.3.1 Evaluate the feasibility, reliability and
	Industrial development	transposition	reproducibility of a method or an equipment
			and implement the concept of risk
			management
			1.3.2 Elaborate the product characteristics
			through the test results by integrating the
			regulatory and commercial data
			1.3.3 Translate test results in instructions and
			procedures
1	Pharmaceutical and	1.4 Process	1.4.1 Design and implement improvements in
	Industrial development	development and	the formulation development techniques
		optimization	1.4.2 Use experimental designs to master the
		optimization	process
			1.4.3 Analyze the economic feasibility of a
			formulation and industrial development plan
2	Analytical Davidonment	2.1 Analytical	· · ·
Z	Analytical Development	2.1 Analytical	2.1.1 Identify the physicochemical variables to
		protocols and	point to an analytical technique of a molecule,
		techniques expertise	impurities and end-product
			2.1.2 Set an experimental context to point to an
			analytical, separation or dosing technique
			depending on the characteristics of the
			formulation, the regulatory and commercial
			constraints
			2.1.3 Implement analytical tests and dosing
			techniques using protocols
2	Analytical Development	2.2 Analytical project	2.2.1 Evaluate the feasibility, reliability and
		development and	reproducibility of an analysis by integrating the
		implementation	concept of risk management and analytical
			validation
			2.2.2 Translate test results in instructions and
			procedures
			2.2.3 Design and implement improvements in
			analytical development techniques
			2.2.4 Analyze the economic feasibility of an
			analytical development project
3	Industrial	3.1 Process	3.1.1 Analyze critical steps of a manufacturing
	Pharmaceutical	engineering and	and a packaging process
	Production	equipment	3.1.2 Analyze the critical specific steps of the
		technology	biotechnology products processes
			3.1.3 Analyze the expected return of each step
			and the deviations
			3.1.4 Design a protocol of equipment
			qualification
			3.1.5 Design a validation protocol of a
			manufacturing and a packaging process
			3.1.6 Determine and implement process control
			tools (Monitoring Statistical Process control -
			MSP)
			3.1.7 Use the statistical tool and interpret
			-
			results to analyze the capability and robustness
			of processes and identify areas for
			improvement
			3.1.8 Determine the follow-up and control set up according to these results

			2.1.0 Propose and argue for technical
			3.1.9 Propose and argue for technical improvements in production methods and
-	Inductorial	2.2. Organization and	processes according to the follow-up results
3	Industrial	3.2 Organization and	3.2.1 Driving the steps of industrial
	Pharmaceutical Draduction	production	transposition to larger scales
	Production	management	3.2.2 Organize and plan various activities of
			production in compliance with regulations,
			quality, hygiene and safety rules, cost and defined deadlines
			3.2.3 Use production management tools
			3.2.4 Organize and control the movement of
			products as well as documentary flows
			3.2.5 Identify and assess the conditions of
			storage, transport and distribution of products
			3.2.6 Optimize the organization of work, work
2	Industrial	2.2 Haalth Cafaty and	processes and means 3.3.1 Deploy a system of environmental risk
3	Pharmaceutical	3.3 Health, Safety and Environment (HSE)	management (an ISO 14001 type) and make it
	Production	Environment (HSE)	live alongside the other management systems
	FIGULEION		(quality, etc.)
3	Industrial	3.4 Continuous	3.4.1 Define and implement tracking indicators
5	Pharmaceutical	improvement	of the activity of a department and productivity
	Production	improvement	indicators
	1 roduction		3.4.2 Analyze the results of production and
			productivity monitoring indicators
			3.4.3 Propose and implement corrective actions
			to reduce costs and delays in conjunction with
			other departments and evaluate the results
			3.4.4 Use methods to improve production
			organization
			3.4.5 Establish continuous improvement
			conditions and follow-up the improvement of
			the industrial processes
3	Industrial	3.5 Cross disciplinary	3.5.1 Animate an action plan within a team
	Pharmaceutical	functions	
	Production		
3	Industrial	3.6 Quality Assurance	3.6.1 Define sampling plans and compliance
	Pharmaceutical		3.6.2 Define and organize batch stability
	Production		monitoring
3	Industrial	3.7 Quality control	3.7.1 Identify and assess the constitution of the
	Pharmaceutical		sample library
	Production		3.7.2 Analyze the causes of a malfunction, a
			drift or a non-compliance related to a process
			or an equipment, and identify corrective
			measures
			3.7.3 Assess the compliance of activities,
			premises/facilities and equipment with the
			quality standards (GMP, ISO) and safety rules
			3.7.4 Assess the compliance of a batch record 3.7.5 Analyze the causes of non-compliance
			related to quality and safety
			3.7.6 Propose and implement corrective actions
			to address the non-compliance related to
		l	

		quality and safety in conjunction with other
		departments
		3.7.7 Assess the compliance, implement the
		analysis (quality control of raw material,
		finished or semi-finished products), interpret
		and validate the results
		3.7.8 Assess the compliance of products from
		the analytical and manufacturing files
		3.7.9 Identify maintenance operation of quality
		control equipment
		3.7.10 Estimate the authenticity of the results
		to generate the certificate of analysis
4 Quality managemen	t 4.1 Program	4.1.1 Define the Quality policy elements of the
	_	
	management and implementation	company 4.1.2 Implement a global Quality approach
	Implementation	
		including the concepts of quality control,
		quality assurance and quality management
		4.1.3 Develop and implement general and
		transversal quality systems deployed in all
		business sectors: research, development,
		production, distribution, marketing, promotion,
		information, operations
		4.1.4 Define the conditions of the relation of
		the customer-supplier relationship: establish
		the quality aspect in the implementation of the
		customer-supplier relationships
		4.1.5 Design procedures for complaints
		handling, batch follow-up, batch recall and
		traceability
4 Quality managemen	t 4.2 Program quality	4.2.1 Design a procedure for process validation
	assurance	and equipment qualification
		4.2.2 Define a method of audit, an audit
		program; achieve audits and make audit follow-
		up
		4.2.3 Develop, implement and evaluate quality
		training programs
4 Quality managemen	at 4.3 Documentation	4.3.1 Organize and document annual reviews
	and traceability	4.3.2 Organize and manage the traceability of
	expertise	all industrial operations
		4.3.3 Organize a document management mode,
		archiving procedures, use of electronic
		document management systems
4 Quality managemen	t 4.4. Financial analysis	4.4.1 Analyze the costs of non-quality
		4.4.2 Understands the principles of
		pharmacoeconomic assessment and medicines
		•
		cost benefits analysis
1		cost benefits analysis 4.4.3 Demonstrates the ability to effectively
		cost benefits analysis 4.4.3 Demonstrates the ability to effectively analyze and manage financial data and
		cost benefits analysis 4.4.3 Demonstrates the ability to effectively analyze and manage financial data and budgetary information
4 Quality managemen		cost benefits analysis 4.4.3 Demonstrates the ability to effectively analyze and manage financial data and budgetary information 4.5.1 Use methods of Risk Management; define
4 Quality managemen	nt 4.5 Risk management expertise	cost benefits analysis 4.4.3 Demonstrates the ability to effectively analyze and manage financial data and budgetary information

4.5.2 Integrate the environmental risk	
management in the Quality Management	
System	

Area	Competency	Indica	tors
0. Quality	0.Medication use	0.0.1	Identify opportunities for improvement of the
Improvement	management		organization's medication-use system.
		0.0.2	Understand the organization's medication-use
			system and its vulnerabilities to adverse drug
			events (ADEs).
		0.0.3	Understand the structure and process of the
			medication-use system.
		0.0.4	Participate in opportunities for improvement in the
			organization's medication-use system by comparing
			the medication-use system to relevant best
			practices.
		0.0.5	Implement quality improvement changes to the
		0.0.5	organization's medication-use system.
		0.0.6	Understand the process for developing,
		0.0.0	implementing, and maintaining a formulary system.
		0.0.7	Make a medication-use policy recommendation
		0.0.7	based on a comparative review (e.g., drug class
			review, drug monograph).
		0.0.8	Participate in the identification of need for,
		0.0.0	development of, implementation of, and evaluation
			of an evidence-based treatment guideline/protocol
			related to individual and population-based patient
			care.
		0.0.9	Participate in pilot interventions to change
		0.0.5	problematic or potentially problematic aspects of
			the medication-use system with the objective of
	1. Medication	0.1.1	improving quality.
		0.1.1	Prepare and dispense medications following existing standards of practice and the
	dispensing		organization's policies and procedures.
		012	Identify the appropriateness of a medication order
		0.1.2	
			before preparing or permitting the distribution of the first dose.
		012	
		0.1.3	Follow the organization's policies and procedures to
			maintain the accuracy of the patient's medication
		014	profile.
		0.1.4	Prepare medication using appropriate techniques
			and following the organization's policies and
		045	procedures.
		0.1.5	Dispense medication products following the
		0.0.4	organization's policies and procedures.
	2. Workplace	0.2.1	Understand the effect of accreditation, legal,
	management		regulatory, and safety requirements on practice.
		0.2.2	Understand the principles of financial management
			of a pharmacy department.
		0.2.3	Evaluate the work load, organize the work flow, and
			check the accuracy of the work of pharmacy staff or
			others.

### **Appendix 5: Clinical Pharmacists Minimal Competencies**

				0.2.4	Use knowledge of the principles of change
				0.2.4	management to achieve organizational,
					departmental, and/or team goals.
1.	Clinical	0.	Analytical skills	1.0.1	Provide concise, applicable, comprehensive, and
	Knowledge and	0.		1.0.1	timely responses to requests for drug information
	Skills				from patients and health care providers.
				1.0.2	Formulate a systematic, efficient, and thorough
					procedure for retrieving drug information.
				1.0.3	Determine from all retrieved biomedical literature
					the appropriate information to evaluate.
				1.0.4	Evaluate the usefulness of biomedical literature
					gathered.
				1.0.5	Formulate responses to drug information requests
					based on analysis of the literature.
				1.0.6	Provide appropriate responses to drug information
					questions that require the pharmacist to draw upon
					his or her knowledge base.
				1.0.7	Assess the effectiveness of drug information
					recommendations.
		1.	Patient Data	1.1.1	Collect and organize all patient-specific information
			collection,		needed by the pharmacist to prevent, detect, and
			assessment,		resolve medication-related problems and to make
			and		appropriate evidence-based, patient-centered
			therapeutic		medication therapy recommendations as part of
			planning skills	112	the interdisciplinary team.
				1.1.2	Determine the presence of any of the following medication therapy problems in a patient's current
					medication therapy:
				1121	Medication used with no medical indication
					Patient has medical conditions for which there is no
				1.1.2.2	medication prescribed
				1.1.2.3	Medication prescribed inappropriately for a
					particular medical condition
				1.1.2.4	Immunization regimen is incomplete
				1.1.2.5	Current medication therapy regimen contains
					something inappropriate (dose, dosage form,
					duration, schedule, route of administration,
					method of administration)
					There is therapeutic duplication
				1.1.2.7	Medication to which the patient is allergic has been prescribed
				1.1.2.8	There are adverse drug or device-related events or
					potential for such events
				1.1.2.9	There are clinically significant drug-drug, drug-
					disease, drug-nutrient, or drug-laboratory test
				1.1.2.1	interactions or potential for such interactions
				1.1.2.10	D Medical therapy has been interfered with by social, recreational, nonprescription, or
					nontraditional drug use by the patient or others
				1.1.2.1	
					prescribed medication therapy
				1.1.2.1	
					financial impact of medication therapy on the
					patient

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		1.1.2.13 Patient lacks understanding of medication therapy
		1.1.2.14 Patient not adhering to medication regimen
		1.1.3 Using an organized collection of patient-specific
		information, summarize patients' health care
		needs.
		1.1.4 When presented with a patient with health care
		needs that cannot be met by the pharmacist, make
		a referral to the appropriate health care provider
		based on the patient's acuity and the presenting
		problem.
		1.1.5 Design evidence-based therapeutic regimen
		1.1.5.1 Identify therapeutic goals and design a patient
		centered regiment that meets the evidence-
		based therapeutic goals established for a patient
		1.1.5.2 Integrate patient-specific information, disease
		and drug information, ethical issues and quality-
		of-life issues;
		1.1.5.3 Consider pharmaco-economic principles
	2. Monitoring &	1.2.1 Design a patient-centered, evidenced-based
	Follow up	monitoring plan for a therapeutic regimen that
	skills	effectively evaluates achievement of the patient-
		specific goals.
		1.2.2 When appropriate, initiate the patient-centered,
		evidence-based therapeutic regimen and
		monitoring plan for a patient according to the
		organization's policies and procedures.
		1.2.3 Accurately assess the patient's progress toward the
		therapeutic goal(s).
		1.2.4 Redesign a patient-centered, evidence-based
		therapeutic plan as necessary based on evaluation
		of monitoring data and therapeutic outcomes.
	3. Transition of	1.3.1 When given a patient who is transitioning from one
	care & Reconciliation	health care setting to another, communicate
		pertinent pharmaco-therapeutic information to the
	skills	receiving health care professionals.
		1.3.2 Ensure that accurate and timely medication-specific information reconciliation procedure regarding a
		specific patient reaches those who need it at the
		appropriate time.
2. Soft Skills	0. Communication	2.0.1 Use effective patient education techniques to
L. JULI JAIIIS	skills	provide counseling to patients and caregivers,
	JKIIJ	including information on medication therapy,
		adverse effects, compliance, appropriate use,
		handling, and medication administration.
		2.0.2 Appropriately select direct patient-care activities
		for documentation.
		2.0.3 Use effective communication practices when
		documenting a direct patient-care activity.
		2.0.4 Explain the characteristics of exemplary
		documentation systems that may be used in the
		organization's environment.
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		1.	Interdisciplinary approach	2.1.1	As appropriate, demonstrate cooperative, collaborative, and communicative working relationships with members of interdisciplinary health care teams.
		2.	2.1.2	Prioritize and manage daily activities that reflect a priority on the delivery of appropriate patient-	
				2.1.3	As appropriate, demonstrate collaborative
				2.1.4	Recommend or communicate a patient-centered, evidence-based therapeutic regimen and
					corresponding monitoring plan to other members of the interdisciplinary team and patients in a way that is systematic, logical, accurate, timely, and
					· · · · · · · · · · · · · · · · · · ·
		2.	Professionalis	2.2.1	Demonstrate pride in and commitment to the
			m, ethics and		profession through appearance, personal conduct,
			patient		<ul> <li>centered care to each patient.</li> <li>As appropriate, demonstrate collaborative professional pharmacist-patient relationships.</li> <li>Recommend or communicate a patient-centered, evidence-based therapeutic regimen and corresponding monitoring plan to other members of the interdisciplinary team and patients in a way that is systematic, logical, accurate, timely, and secures consensus from the team and patient.</li> <li>Demonstrate pride in and commitment to the profession through appearance, personal conduct, and association membership.</li> <li>Act ethically in the conduct of all job-related activities.</li> <li>Demonstrate ownership of and responsibility for the welfare of the patient by addressing pharmacy related patient care problems</li> <li>Practice self-managed continuing professional development with the goal of improving the quality of one's own performance through self-assessment and personal change.</li> <li>Understand various leadership philosophies that effectively support direct patient care and pharmacy practice excellence.</li> <li>Suggest a feasible design for a practice-related project.</li> <li>Secure any necessary approvals, including IRB, for one's design of a practice-related project.</li> <li>Implement a practice-related project as specified in its design.</li> <li>Effectively present the results of a practice-related project.</li> <li>Employ accepted manuscript style to prepare a final report of a practice-related project.</li> </ul>
			advocacy	2.2.2	
				2.2.3	Demonstrate ownership of and responsibility for
		3.	Leadership	2.3.1	
			and self-		
			management		
				2.3.2	
					effectively support direct patient care and
3.	Ability to conduct clinical	0.	Research project	3.0.1	
	research		management skills	3.0.2	
				3.0.3	Implement a practice-related project as specified in its design.
				3.0.4	
				3.0.5	Employ accepted manuscript style to prepare a final
					• • • • •
4.		0.	Educational	4.0.1	
conduct clinio research	•		skills		of all educational activities.
				4.0.2	Use skill in case-based teaching.
	education			4.0.3	Use public speaking skills to speak effectively in
					large and small group situations.
				4.0.4	Use knowledge of audio-visual aids and handouts to
_	11		Informer the	<b>F</b> 0 1	enhance the effectiveness of communications.
5.	Use	0.	Informatics	5.0.1	Explain security and patient protections such as
	information		skills		access control, data security, data encryption,
	technology to				privacy regulations, as well as ethical and legal
	make decisions				issues related to the use of information technology
	and reduce				in pharmacy practice.
				5.0.2	Eversion skill in basis use of detabases and deta
	error.			5.0.2	Exercise skill in basic use of databases and data analysis software.

	5.0.3	Successfully make decisions using electronic data and information from internal information databases, external online databases, and the Internet.	
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