

Accounting and Financial in Pharmacy Practice: Quality Perspective

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ABSTRACT

Objectives: To explore the accounting system quality management policy and procedures in pharmacy practice as a new initiative in Saudi Arabia. **Methods:** It was a narrative review of accounting system quality management policy and procedures in pharmacy practice. Litterateur searched various databases, including PubMed, Medline, and Google Scholar. The search period is from the 1960s until 15 October 2023. The term is in full-text English and includes Case Reports, Classical Articles, Clinical Conferences, Clinical Studies, Clinical Trials, Evaluation Studies, Government Publications, Guideline, Meta-Analysis, Observational Studies, Practice Guidelines, Randomized Controlled Trials, Reviews, Systematic Reviews, with Humans subject. All hospital or community pharmacy services are included in a search term. Besides, the National and international guidelines of general infection control in hospital practice. The committee of pharmacy accounting policy and procedures formulated and consisted of various expert members. That includes clinical pharmacists, accountant specialists, and financial experts. The guidelines of the policy draft by one member by the second member were reviewed and corrected. The third revision was by the accountant specialist. The topic emphasizes accounting system quality management of the Pharmacy policy. **Results:** The quality management of accounting system policy and procedures in pharmacy practice has consisted of accounting auditing and financial performance indicators. The review declares accounting system quality indicators and financial indicators. Besides, the techniques of conducting quality management systems for accounting programs in pharmacy practice. **Conclusion:** The quality management of accounting system policy and procedures in pharmacy practice demands keeping inventory products at an appropriate level, with cost control. Besides, monitor financial indicators and adhere to an accounting auditing system. Thus, quality management of accounting system policy and procedures is highly recommended for pharmacy career professionals worldwide.

Keywords: Accounting, Financial, Policy, Pharmacy, Quality management, Saudi Arabia.

INTRODUCTION

Total quantity management (TQM) in pharmacy practice is well known locally and internationally.^[1-4] Various standards of pharmacy quality performances are published worldwide to improve patient care, and pharmacy activities, prevent medication errors, and avoid additional economic burden on the healthcare system.^[5,6] Therefore expanding the role of quality management to all new pharmacy services is recommended. The new initiated accounting and financial project in pharmacy practice is highly demand for quality management during the implementation of accounting audit in pharmacy practice and setting the financial key indicators.^[7-14]

Total quantity management is a critical foundation in pharmacy accounting and financial services.^[7-14] It needs high-quality hospital or community pharmacy products, inventory management for convenient availability of medications for all patients, and control over or under expenses of the product cost.^[7-10,13] Besides, the cash flow available during pharmacy operations is required to meet all

patient needs and financial obligations and to continue compliance with local and international standards of accounting and financing.^[7-10,13,5]

Each accounting and finance aspect had various requirements for total quality management in pharmacy practice. The accounting aspect needs what has known about pharmacy audits, while the financial part requires some key performance indicators elements. Both are combined in pharmacy practice's total quantity measurement of accounting and financials.^[5-7,10,13]

Despite total quality management indicators such as accounting, auditing, and financial performance indicators, policies and procedures are essential to pharmacy operations. The topic is rarely reported locally or in Gulf or Arabic countries and internationally.^[11-29] All total quality management policies and procedures found as any person not especially for pharmacy field.^[9,30-36] Furthermore, the authors were unaware of publications on comprehensive quality control policies and procedures for accounting and finance in pharmacy practice. The purpose of the current overview is to describe the principles and procedures of total accounting and financial quality management in pharmacy practice.

METHODS

It is a narrative review of Financial and accounting in pharmacy practice. The literature search was performed using various databases, including PubMed, Medline, and Google Scholar, about specific pharmacy practice accounting and financial system topics. The search period was from the 1960s until 15 May 2023. The searched terms were in full-text English. They included Full text, Case Reports, Classical Articles, Clinical Conferences, Clinical Studies, Clinical Trials, Evaluation Studies, Government Publications, Guidelines, Meta-Analysis, Observational Studies, Practice Guidelines, Randomized Controlled Trials, Reviews, Systematic Reviews, Humans, in the English language. The pharmacy services included inpatient, outpatient, or ambulatory care pharmacy, satellite pharmacy, extemporaneous preparation, repackaging units, pharmacy store, drug information center, and clinical pharmacy services. Moreover, the national and international guidelines of general accounting and financial practice emphasizing pharmacy and healthcare settings were used as guides for writing the review.^[11-26] That's including guidelines from the Saudi Central Bank, Capital Market Authority, Saudi Organization for Certified Public Accountants (SOCPA), American Institute of Certified Public Accountants (AICPA), American Accounting Association (AAA), The International Auditing and Assurance Standards Board (IAASB), The International Accounting Education Standards Board (IAESB), The International Ethics Standards Board (IESBA), The International Public Sector Accounting Standards Board (IPSASB).^[9,30-36] The pharmacy Financial and accounting committee comprises experts, including clinical pharmacists, accountants, and expert financial specialists. Some authors drafted the policy guidelines, and other authors reviewed them. The accountant specialist revised the draft. The policy included topics in accounting cycle, visibility study in pharmacy environment, pharmacy financial statement included income list, cash flow, budget sheet or balance sheet, electronic applications of accounting and finance in the pharmacy setting, quality of pharmacy Financial and accounting, competency of pharmacy Financial and accounting, and education and training of pharmacy Financial and accounting. The current topic emphasizes accounting system quality management policy and procedures in pharmacy practice. The Appraisal of Guidelines, Research, and Evaluation (AGREE) guided the reporting of the results of this review.^[37]

The search term methodology was done as follows:

Search: **(pharmacy[Title/Abstract]) AND (Financial[Title/Abstract])** Filters: **Full text, Case Reports, Classical Article, Clinical Conference, Clinical Study, Clinical Trial, Evaluation Study, Government Publication, Guideline, Meta-Analysis, Observational Study, Practice Guideline, Randomized Controlled Trial, Review, Systematic Review, Humans, English**

("pharmacy"[Title/Abstract] AND "Financial"[Title/Abstract]) AND ((casereports[Filter] OR classicalarticle[Filter] OR clinicalconference[Filter] OR clinicalstudy[Filter] OR clinicaltrial[Filter] OR evaluationstudy[Filter] OR governmentpublication[Filter] OR guideline[Filter] OR meta-analysis[Filter] OR observationalstudy[Filter] OR practiceguideline[Filter] OR randomizedcontrolledtrial[Filter] OR review[Filter] OR systematicreview[Filter]) AND (ff[Filter]) AND (humans[Filter]) AND (english[Filter]))

Search: **(pharmacy[Text Word]) AND (Financial[Text Word])** Filters: **Full text, Case Reports, Classical Article, Clinical Conference, Clinical Study, Clinical Trial, Evaluation Study, Government Publication, Guideline, Meta-Analysis, Observational Study, Practice Guideline, Randomized Controlled Trial, Review, Systematic Review, Humans, English**

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Search: **(pharmacy[MeSH Terms]) AND (Financial[MeSH Terms])** Filters: **Full text, Case Reports, Classical Article, Clinical Conference, Clinical Study, Clinical Trial, Evaluation Study, Government Publication, Guideline, Meta-Analysis, Observational Study, Practice Guideline, Randomized Controlled Trial, Review, Systematic Review, Humans, English**

((("pharmacy"[MeSH Terms] OR "pharmacies"[MeSH Terms]) AND "economics"[MeSH Terms]) AND ((casereports[Filter] OR classicalarticle[Filter] OR clinicalconference[Filter] OR clinicalstudy[Filter] OR clinicaltrial[Filter] OR evaluationstudy[Filter] OR governmentpublication[Filter] OR guideline[Filter] OR meta-analysis[Filter] OR observationalstudy[Filter] OR practiceguideline[Filter] OR randomizedcontrolledtrial[Filter] OR review[Filter] OR systematicreview[Filter]) AND (ff[Filter]) AND (humans[Filter]) AND (english[Filter]))

controlledtrial[Filter] OR review[Filter] OR systematicreview[Filter]) AND (ff[Filter]) AND (humans[Filter]) AND (english[Filter]))

Translations

pharmacy[MeSH Terms]: «pharmacy»[MeSH Terms] OR «pharmacies»[MeSH Terms]

Financial[MeSH Terms]: «economics»[MeSH Terms]

Search: **(pharmacist[Title/Abstract]) AND (Financial[Title/Abstract])** Filters: **Full text, Case Reports, Classical Article, Clinical Conference, Clinical Study, Clinical Trial, Evaluation Study, Government Publication, Guideline, Meta-Analysis, Observational Study, Practice Guideline, Randomized Controlled Trial, Review, Systematic Review, Humans, English**

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Search: **(pharmacist[Text Word]) AND (Financial[Text Word])** Filters: **Full text, Case Reports, Classical Article, Clinical Conference, Clinical Study, Clinical Trial, Evaluation Study, Government Publication, Guideline, Meta-Analysis, Observational Study, Practice Guideline, Randomized Controlled Trial, Review, Systematic Review, Humans, English**

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(“pharmacists”[MeSH Terms] AND “economics”[MeSH Terms]) AND ((casereports[Filter] OR classicalarticle[Filter] OR clinicalconference[Filter] OR clinicalstudy[Filter] OR clinicaltrial[Filter] OR evaluationstudy[Filter] OR governmentpublication[Filter] OR guideline[Filter] OR meta-analysis[Filter] OR observationalstudy[Filter] OR practiceguideline[Filter] OR randomizedcontrolledtrial[Filter] OR review[Filter] OR systematicreview[Filter]) AND (fft[Filter]) AND (humans[Filter]) AND (english[Filter]))

Translations

pharmacist[MeSH Terms]: «pharmacists» [MeSH Terms]

Financial[MeSH Terms]: «economics» [MeSH Terms]

Search: (**pharmacy**[Title/Abstract]) AND (**accounting**[Title/Abstract]) Filters: **Full text, Case Reports, Classical Article, Clinical Conference, Clinical Study, Clinical Trial, Evaluation Study, Government Publication, Guideline, Meta-Analysis, Observational Study, Practice Guideline, Randomized Controlled Trial, Review, Systematic Review, Humans, English**

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Search: (**pharmacy**[Text Word]) AND (**accounting**[Text Word]) Filters: **Full text, Case Reports, Classical Article, Clinical Conference, Clinical Study, Clinical Trial, Evaluation Study, Government Publication, Guideline, Meta-Analysis, Observational Study, Practice Guideline, Randomized Controlled Trial, Review, Systematic Review, Humans, English**

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systematicreview[Filter]) AND (fft[Filter]) AND (humans[Filter]) AND (english[Filter]))
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Translations

pharmacy[MeSH Terms]: «pharmacy» [MeSH Terms] OR «pharmacies» [MeSH Terms]

accounting[MeSH Terms]: «accounting» [MeSH Terms]

Search: (**pharmacist**[Title/Abstract]) AND (**accounting**[Title/Abstract]) Filters: **Full text, Case Reports, Classical Article, Clinical Conference, Clinical Study, Clinical Trial, Evaluation Study, Government Publication, Guideline, Meta-Analysis, Observational Study, Practice Guideline, Randomized Controlled Trial, Review, Systematic Review, Humans, English**

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Controlled Trial, Review, Systematic Review, Humans, English

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Translations

pharmacist[MeSH Terms]: «pharmacists» [MeSH Terms]

accounting[MeSH Terms]: «accounting» [MeSH Terms]

Search: (**pharmaceutical care**[Title/Abstract]) AND (**accounting**[Title/Abstract]) Filters: **Full text, Case Reports, Classical Article, Clinical Conference, Clinical Study, Clinical Trial, Evaluation Study, Government Publication, Guideline, Meta-Analysis, Observational Study, Practice Guideline, Randomized Controlled Trial, Review, Systematic Review, Humans, English**

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text, Case Reports, Classical Article, Clinical
Conference, Clinical Study, Clinical Trial,
Evaluation Study, Government Publication,
Guideline, Meta-Analysis, Observational
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Humans, English**

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Translations

pharmaceutical care[MeSH Terms]:
«pharmaceutical services»[MeSH Terms]

accounting[MeSH Terms]: «accounting»
[MeSH Terms]

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**Full text, Case Reports, Classical Article,
Clinical Conference, Clinical Study, Clinical
Trial, Evaluation Study, Government
Publication, Guideline, Meta-Analysis,
Observational Study, Practice Guideline,**

**Randomized Controlled Trial, Review,
Systematic Review, Humans, English**

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Translations

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Guideline, Meta-Analysis, Observational
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Translations

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Search: (**pharmacy[MeSH Terms]**) AND
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**text, Case Reports, Classical Article, Clinical
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Translations

pharmacy[MeSH Terms]: «pharmacy»[MeSH
Terms] OR "pharmacies"[MeSH Terms]

Warnings

(pharmacy[MeSH Terms]) AND (accounting
cycle[MeSH Terms])

Term not found: cycle

Search: (**pharmacist[Title/Abstract]**) AND
(**accounting cycle[Title/Abstract]**) Filters:
**Full text, Case Reports, Classical Article,
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Trial, Evaluation Study, Government
Publication, Guideline, Meta-Analysis,
Observational Study, Practice Guideline,
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systematicreview[Filter]) AND (fft[Filter])
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Translations

accounting: «account»[All Fields]
OR «accounted»[All Fields] OR
«accounting»[MeSH Terms] OR

“accounting”[All Fields] OR “accountings”[All Fields] OR “accounts”[All Fields]

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Translations

accounting: «account»[All Fields] OR «accounted»[All Fields] OR «accounting»[MeSH Terms] OR “accounting”[All Fields] OR “accountings”[All Fields] OR “accounts”[All Fields]

Search: (pharmacist[MeSH Terms]) AND (accounting cycle[MeSH Terms]) Filters: Full text, Case Reports, Classical Article, Clinical Conference, Clinical Study, Clinical Trial, Evaluation Study, Government Publication, Guideline, Meta-Analysis, Observational Study, Practice Guideline, Randomized Controlled Trial, Review, Systematic Review, Humans, English

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Translations

pharmacist[MeSH Terms]: «pharmacists»[MeSH Terms]

Warnings

(pharmacist[MeSH Terms]) AND (accounting cycle[MeSH Terms])

Term not found: cycle

Search: (pharmaceutical care[Title/Abstract]) AND (accounting cycle[Title/Abstract]) Filters: Full text, Case Reports, Classical Article, Clinical Conference, Clinical Study, Clinical Trial, Evaluation Study, Government Publication, Guideline, Meta-Analysis, Observational Study, Practice Guideline, Randomized Controlled Trial, Review, Systematic Review, Humans, English

(“pharmaceutical care”[Title/Abstract] AND (“account”[All Fields] OR “accounted”[All Fields] OR “accounting”[MeSH Terms] OR “accountings”[All Fields] OR “accounts”[All Fields]) AND “cycle”[Title/Abstract])) AND ((casereports[Filter] OR classicalarticle[Filter] OR clinicalconference[Filter] OR clinicalstudy[Filter] OR clinicaltrial[Filter] OR evaluationstudy[Filter] OR governmentpublication[Filter] OR guideline[Filter] OR meta-analysis[Filter] OR observationalstudy[Filter] OR practiceguideline[Filter] OR randomizedcontrolledtrial[Filter] OR review[Filter] OR systematicreview[Filter]) AND (ff[Filter]) AND (humans[Filter]) AND (english[Filter]))

Translations

accounting: «account»[All Fields] OR «accounted»[All Fields] OR «accounting»[MeSH Terms] OR “accounting”[All Fields] OR “accountings”[All Fields] OR “accounts”[All Fields]

Search: (pharmaceutical care[Text Word]) AND (accounting cycle[Text Word]) Filters: Full text, Case Reports, Classical Article, Clinical Conference, Clinical Study, Clinical Trial, Evaluation Study, Government Publication, Guideline, Meta-Analysis, Observational Study, Practice Guideline, Randomized Controlled Trial, Review, Systematic Review, Humans, English

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controlledtrial[Filter] OR review[Filter] OR systematicreview[Filter]) AND (ff[Filter]) AND (humans[Filter]) AND (english[Filter]))

Translations

accounting: «account»[All Fields] OR «accounted»[All Fields] OR «accounting»[MeSH Terms] OR “accounting”[All Fields] OR “accountings”[All Fields] OR “accounts”[All Fields]

Search: (pharmaceutical care[MeSH Terms]) AND (accounting cycle[MeSH Terms]) Filters: Full text, Case Reports, Classical Article, Clinical Conference, Clinical Study, Clinical Trial, Evaluation Study, Government Publication, Guideline, Meta-Analysis, Observational Study, Practice Guideline, Randomized Controlled Trial, Review, Systematic Review, Humans, English

((pharmaceutical care[MeSH Terms]) AND (accounting cycle[MeSH Terms])) AND ((casereports[Filter] OR classicalarticle[Filter] OR clinicalconference[Filter] OR clinicalstudy[Filter] OR clinicaltrial[Filter] OR evaluationstudy[Filter] OR governmentpublication[Filter] OR guideline[Filter] OR meta-analysis[Filter] OR observationalstudy[Filter] OR practiceguideline[Filter] OR randomizedcontrolledtrial[Filter] OR review[Filter] OR systematicreview[Filter]) AND (ff[Filter]) AND (humans[Filter]) AND (english[Filter]))

Translations

pharmaceutical care[MeSH Terms]: «pharmaceutical services»[MeSH Terms]

Warnings

(pharmaceutical care[MeSH Terms]) AND (accounting cycle[MeSH Terms])

Term not found: cycle

Search: ((pharmacy[Title/Abstract]) AND (accounting[Title/Abstract])) AND (Saudi[Title/Abstract]) Filters: Full text, Case Reports, Classical Article, Clinical Conference, Clinical Study, Clinical Trial, Evaluation Study, Government Publication, Guideline, Meta-Analysis, Observational Study, Practice Guideline, Randomized Controlled Trial, Review, Systematic Review, Humans, English

(“pharmacy”[Title/Abstract] AND “accounting”[Title/Abstract] AND “Saudi”[Title/Abstract]) AND ((casereports[Filter] OR classicalarticle[Filter] OR clinicalconference[Filter] OR clinicalstudy[Filter] OR clinicaltrial[Filter] OR evaluationstudy[Filter] OR governmentpublication[Filter] OR guideline[Filter] OR meta-analysis[Filter] OR observationalstudy[Filter] OR

practiceguideline[Filter] OR randomizedc
ontrolledtrial[Filter] OR review[Filter] OR
systematicreview[Filter]) AND (fft[Filter])
AND (humans[Filter]) AND (english[Filter]))

Search: ((pharmacy[Text Word]) AND
(accounting[Text Word])) AND (saudi[Text
Word]) Filters: Full text, Case Reports,
Classical Article, Clinical Conference,
Clinical Study, Clinical Trial, Evaluation
Study, Government Publication, Guideline,
Meta-Analysis, Observational Study, Practice
Guideline, Randomized Controlled Trial,
Review, Systematic Review, Humans, English

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"accounting"[Text Word] AND "saudi"[Text
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clinicalconference[Filter] OR
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guideline[Filter] OR meta-analysis[Filter]
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systematicreview[Filter]) AND (fft[Filter])
AND (humans[Filter]) AND (english[Filter]))

Search: ((pharmacy[MeSH Terms]) AND
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(saudi[MeSH Terms]) Filters: Full text,
Case Reports, Classical Article, Clinical
Conference, Clinical Study, Clinical Trial,
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systematicreview[Filter]) AND (fft[Filter])
AND (humans[Filter]) AND (english[Filter]))

Translations

pharmacy[MeSH Terms]: «pharmacy»[MeSH
Terms] OR «pharmacies»[MeSH Terms]

Warnings

((pharmacy[MeSH Terms]) AND (accounting
cycle[MeSH Terms])) AND (saudi[MeSH
Terms])

Terms not found: cycle, Saudi.

Search: ((pharmacy[Title/Abstract])
AND (Financial[Title/Abstract])) AND
(saudi[Title/Abstract]) Filters: Full text,
Case Reports, Classical Article, Clinical
Conference, Clinical Study, Clinical Trial,
Evaluation Study, Government Publication,
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governmentpublication[Filter] OR
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AND (humans[Filter]) AND (english[Filter]))

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Word]) Filters: Full text, Case Reports,
Classical Article, Clinical Conference,
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AND (humans[Filter]) AND (english[Filter]))

Translations

pharmacy[MeSH Terms]: «pharmacy»[MeSH
Terms] OR «pharmacies»[MeSH Terms]

Financial[MeSH Terms]: «economics»[MeSH
Terms]

Warnings

((pharmacy[MeSH Terms]) AND
(Financial[MeSH Terms])) AND (saudi[MeSH
Terms])

Term not found: Saudi

Search: ((pharmacy[Title/Abstract])
AND (accounting[Title/Abstract])) AND
(policy[Title/Abstract]) Filters: Full text,
Case Reports, Classical Article, Clinical
Conference, Clinical Study, Clinical Trial,
Evaluation Study, Government Publication,
Guideline, Meta-Analysis, Observational
Study, Practice Guideline, Randomized
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AND (humans[Filter]) AND (english[Filter]))

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(procedure[Title/Abstract]) Filters: Full text,
Case Reports, Classical Article, Clinical
Conference, Clinical Study, Clinical Trial,
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AND (humans[Filter]) AND (english[Filter]))

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Case Reports, **Classical Article**, **Clinical**
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AND (humans[Filter]) AND (english[Filter]))

Search: ((**pharmacy**[Text Word]) AND
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Classical Article, **Clinical Conference**,
Clinical Study, **Clinical Trial**, **Evaluation**
Study, **Government Publication**, **Guideline**,
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Review, **Systematic Review**, **Humans**, **English**

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Search: ((**pharmacy**[MeSH Terms])
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Case Reports, **Classical Article**, **Clinical**
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AND (humans[Filter]) AND (english[Filter]))

Translations

pharmacy[MeSH Terms]: «pharmacy»[MeSH
Terms] OR «pharmacies»[MeSH Terms]

Financial[MeSH Terms]: «economics»[MeSH
Terms]

policy[MeSH Terms]: «policy»[MeSH Terms]

Search: ((**pharmacy**[Title/Abstract])
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Humans, **English**

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systematicreview[Filter]) AND (fft[Filter])
AND (humans[Filter]) AND (english[Filter]))

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Classical Article, **Clinical Conference**,
Clinical Study, **Clinical Trial**, **Evaluation**
Study, **Government Publication**, **Guideline**,
Meta-Analysis, **Observational Study**, **Practice**
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Review, **Systematic Review**, **Humans**, **English**

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AND (humans[Filter]) AND (english[Filter]))

Search: ((**pharmacy**[MeSH Terms])
AND (**Financial**[MeSH Terms])) AND
(**procedure**[MeSH Terms]) Filters: **Full text**,
Case Reports, **Classical Article**, **Clinical**
Conference, **Clinical Study**, **Clinical Trial**,
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Controlled Trial, **Review**, **Systematic Review**,
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systematicreview[Filter]) AND (fft[Filter])
AND (humans[Filter]) AND (english[Filter]))

Translations

pharmacy[MeSH Terms]: «pharmacy»[MeSH
Terms] OR «pharmacies»[MeSH Terms]

Financial[MeSH Terms]: «economics»[MeSH
Terms]

procedure[MeSH Terms]: «methods»[MeSH
Terms]

Search: ((**pharmacy**[Text Word]) AND
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Word]) Filters: **Full text**, **Case Reports**,
Classical Article, **Clinical Conference**,
Clinical Study, **Clinical Trial**, **Evaluation**
Study, **Government Publication**, **Guideline**,
Meta-Analysis, **Observational Study**, **Practice**
Guideline, **Randomized Controlled Trial**,
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Word]) AND (casereports[Filter]
OR classicalarticle[Filter] OR
clinicalconference[Filter] OR
clinicalstudy[Filter] OR clinicaltrial[Filter])

OR evaluationstudy[Filter] OR governmentpublication[Filter] OR guideline[Filter] OR meta-analysis[Filter] OR observationalstudy[Filter] OR practiceguideline[Filter] OR randomizedcontrolledtrial[Filter] OR review[Filter] OR systematicreview[Filter]) AND (fft[Filter]) AND (humans[Filter]) AND (english[Filter]))

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("pharmacy"[Text Word] AND "accounting"[Text Word] AND "procedure"[Text Word]) AND ((casereports[Filter] OR classicalarticle[Filter] OR clinicalconference[Filter] OR clinicalstudy[Filter] OR clinicaltrial[Filter] OR evaluationstudy[Filter] OR governmentpublication[Filter] OR guideline[Filter] OR meta-analysis[Filter] OR observationalstudy[Filter] OR practiceguideline[Filter] OR randomizedcontrolledtrial[Filter] OR review[Filter] OR systematicreview[Filter]) AND (fft[Filter]) AND (humans[Filter]) AND (english[Filter]))

Search: ((pharmacy[MeSH Terms]) AND (accounting[MeSH Terms])) AND (policy[MeSH Terms]) Filters: Full text, Case Reports, Classical Article, Clinical Conference, Clinical Study, Clinical Trial, Evaluation Study, Government Publication, Guideline, Meta-Analysis, Observational Study, Practice Guideline, Randomized Controlled Trial, Review, Systematic Review, Humans, English

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Translations

pharmacy[MeSH Terms]: «pharmacy»[MeSH Terms] OR «pharmacies»[MeSH Terms]

accounting[MeSH Terms]:

«accounting»[MeSH Terms]

policy[MeSH Terms]: «policy»[MeSH Terms]

Search: ((pharmacy[MeSH Terms]) AND (accounting[MeSH Terms])) AND (procedure[MeSH Terms]) Filters: Full text, Case Reports, Classical Article, Clinical Conference, Clinical Study, Clinical Trial, Evaluation Study, Government Publication, Guideline, Meta-Analysis, Observational Study, Practice Guideline, Randomized Controlled Trial, Review, Systematic Review, Humans, English

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Translations

pharmacy[MeSH Terms]: «pharmacy»[MeSH Terms] OR «pharmacies»[MeSH Terms]

accounting[MeSH Terms]:

«accounting»[MeSH Terms]

procedure[MeSH Terms]: «methods»[MeSH Terms]

Search: ((pharmacy[Title/Abstract]) AND (Accounting[Title/Abstract])) AND (quality management[Title/Abstract]) Filters: Full text, Case Reports, Classical Article, Clinical Conference, Clinical Study, Clinical Trial, Evaluation Study, Government Publication, Guideline, Meta-Analysis, Observational Study, Practice Guideline, Randomized Controlled Trial, Review, Systematic Review, Humans, English

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(("pharmacy"[MeSH Terms] OR "pharmacies"[MeSH Terms]) AND "accounting"[MeSH Terms] AND ("qualities"[All Fields] OR "quality"[All Fields] OR "quality s"[All Fields]) AND ("organization and administration"[MeSH Terms] OR "disease management"[MeSH Terms])) AND ((casereports[Filter] OR classicalarticle[Filter] OR clinicalconference[Filter] OR clinicalstudy[Filter] OR clinicaltrial[Filter] OR evaluationstudy[Filter] OR governmentpublication[Filter] OR guideline[Filter] OR meta-analysis[Filter] OR observationalstudy[Filter] OR practiceguideline[Filter] OR randomizedcontrolledtrial[Filter] OR review[Filter] OR systematicreview[Filter]) AND (fft[Filter]) AND (humans[Filter]) AND (english[Filter]))

Translations

pharmacy[MeSH Terms]: «pharmacy»[MeSH Terms] OR «pharmacies»[MeSH Terms]

Accounting[MeSH Terms]:

«accounting»[MeSH Terms]

quality: «qualities»[All Fields] OR «quality»[All Fields] OR «qualitys»[All Fields]

management[MeSH Terms]: «organization and administration»[MeSH Terms] OR «disease management»[MeSH Terms]

Search: ((**pharmacy**[Title/Abstract]) AND (**Financial**[Title/Abstract])) AND (**quality management**[Title/Abstract]) Filters: **Full text, Case Reports, Classical Article, Clinical Conference, Clinical Study, Clinical Trial, Evaluation Study, Government Publication, Guideline, Meta-Analysis, Observational Study, Practice Guideline, Randomized Controlled Trial, Review, Systematic Review, Humans, English**

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Financial[MeSH Terms]: «economics»[MeSH Terms]

quality: «qualities»[All Fields] OR «quality»[All Fields] OR «quality s»[All Fields]

management[MeSH Terms]: «organization and administration»[MeSH Terms] OR «disease management»[MeSH Terms]

RESULTS AND DISCUSSION

The pharmacy services should implement the flowing policy and procedures for quality management in the accounting of pharmacy practice as follows:^[5-13]

1. The pharmacy should strengthen first-class accounting and financial systems through manual and electronic documentation.
2. The excellent requirements enhance the overall performance and things to do in pharmacy services.
3. The pharmacy departments assign the duty of pharmacy accountant or designate accounting to manage pharmacist or expert accountant.
4. The accounting management pharmacist or expert accountant sets up the strategic sketch of good enhancement for a pharmacy accounting system.
5. The accounting management pharmacist or expert accountant sets up the critical overall pharmacy accounting performance indicators for any input of medications or supply or processes receiving or dispensing and output medications or supply of pharmacy services through pharmacy accounting competency.
6. The accounting management pharmacist or expert accountant setup up the

measurements of KPI primarily based on percentages and achieved documentation as appropriate and compliance with local and international standards (Table 1).

7. The accounting management pharmacist or talented accountant sets up the timetable. The frequency of measuring KPI month-to-month or quarterly (Table 1).
8. The accounting management pharmacist or expert accountant formats the datasheet of KPI in contrast to the preceding reports.
9. The accounting management pharmacist or talented accountant mentioned the file with the pharmacy accounting administration.
10. The pharmacy accounting manage unit analyzed the pleasant administration record and mentioned it quarterly with the pharmacy team of workers.
11. The accounting management pharmacist or expert accountant makes a Roadmap graph that will set up for fantastic enhancement of the pharmacy accounting system.
12. The accounting management pharmacist or talented accountant monitors the roadmap through internal auditing at all pharmacy carriers and alternate and enhance the pharmacy accounting system.
13. The accounting management pharmacist or expert accountant periodically utilized an external auditor for the pharmacy accounting system.
14. The accounting management pharmacist or talented accountant Checks the preceding and the modern repute and modifications in the pharmacy practice accordingly.
15. The accounting management pharmacist or expert accountant writes the final record of the pharmacy accounting system high-quality enhancement based totally on the global requirements or guidelines. The remaining document may want to be a precis or particular description of the problem, troubles outlines, measures key for progress, the approach of gathering information, analysis, and interpretation of the data. Besides modifications strategies, altering effects, future steps.^[38-40]

CONCLUSION

The pharmacy quality management of accounting system policy and procedures is a new institute project professional pharmacy career. It is required for accounting and financial systems in pharmaceutical care services. It is the basis of evaluation and

Pharmacy Accounting and financial Quality management						
No	Topic	Activity	Note	Target		
1.	Patients care input	Radom sample of test pharmacy inventory medications and other non-medication products and compare with actual inventory and financial report per each pharmacy section per 3 month.	Number of sample discrepancy/number of samples.	Zero		
		A random sample of the accounting cycle for medications or non-medication products.	Total number of medications adherence to accounting cycle/total sample medications.	100%		
			Total number of non-medication products adherence to accounting cycle/total non-medication products.	100%		
		Radom sample of Journal entry for medications or non-medication products.	Total number of medications adherence to Journal entry/total sample medications.	100%		
			Total number of non-medication products adherence to Journal entry/total sample medications.	100%		
		A random sample of the general ledger for medications or non-medication products.	Total number of medications adherence to general ledger/total sample medications.	100%		
			Total number of non-medication products adherence to general ledger/total sample non-medication products.	100%		
		Check the medications or non-medication product's current stock, out-of-stock, overstock, understock, and expired stock or pharmaceutical wastage.	Number of current stock/total stock.	Zero		
			Number of overstocks/total stock.	Zero		
			Number of understocks/total stock.	Zero		
			Number of expired stock/total stock.	Zero		
		2.	Patients care processes	Radom sample of Trial balance preparation for medications or non-medication products.	Total number of medications adherence to Trial balance/total sample medications.	100%
					Total number of non-medication products adherence to Trial balance/total sample non-medication products.	100%
Radom sample of Adjusting entries preparation for medications or non-medication products.	Total number of medications adherence to Adjusting entries/total sample medications.			100%		
	Total number of non-medication products adherence to Adjusting entries/total sample non-medication products.			100%		
Radom sample of Adjusted trial balance for medications or non-medication products.	Total number of medications adherence to Adjusted trial balance/total sample medications.			100%		
	Total number of non-medication products adherence to Adjusted trial balance/total sample non-medication products.			100%		
3.	Patients care output	Radom sample of income statement for medications or non-medication products.	Total number of medications adherence to income statement/total sample medications.	100%		
			Total number of non-medication products adherence to income statement/total sample non-medication products.	100%		
		Radom sample of statement of cash flows for medications or non-medication products.	Total number of medications adherence to a statement of cash flows/total sample medications.	100%		
			Total number of non-medication products adherence to a statement of cash flows/total sample non-medication products.	100%		
		A random sample of the balance sheet for medications or non-medication products.	Total number of medications adherence to balance sheet/total sample medications.	100%		
			Total number of non-medication products adherence to balance sheet/total sample non-medication products.	100%		
		General analytics	The balance sheet should be positive.			
			The liabilities should be decreased.			
			The equity should be decreased.			

continued...

15. Pharmacy Accounting and financial Quality management 16.				
No.	Topic	Activity	Note	Target
			Total cash should be increased.	
			Total assets should be increased.	
		Profitability analysis	Return on Assets (ROA) = net profit/total assets	
			Return on Equity (ROE) = net profit/total equity	
			Return on Capital Employed (ROCE) = net profit/capital employed (total assets-current liability),	
		Liquidity analysis	Cash ratio = Cash/total current liability	
			Liquid assets = (cash + account receivable + short-term investment)/current liabilities.	
			Current ratio = Total assets (cash + account receivable + short-term investment+ inventory + prepaid expenses)/current liability.	
		Liabilities analysis	Debt to assets = total liabilities/total assets in the balance sheet.	
			Revenue earning rate = operations profit by interest/liabilities	
		Efficiency analysis	Inventory Turnover Rate (ITOR) = sales or cost of goods/inventory.	
			Number of days to finish the inventory on an annual bases = 365/ITOR or days sales of inventory.	
			account receivable turnover ratio = the revenue/account receivable.	
			Average collection period = 365/receivable turn rate.	
			account payable turnover rate = payment or expenses/account payable.	
			Average payment period = 365/the payable turn rate.	
		Price or market analysis or investment analysis.	Earnings per Share (EPS) = net profit/common shares or equity.	
			a Price-to-Earnings ratio (P/E) ratio = share price/ EPS.	
			the price/earning to growth ratio = the P/E ratio/ expected EPS growth.	
			dividends per share (DPS) = dividends are paid/ common stock.	
			dividend yield ratio = DPS/share price.	
			dividends payout = dividends paid/the net profit.	
4.	Communication	Monitor the number of educational lectures and number of attendees.	Number of educational lectures for pharmacy staff and healthcare professionals quarterly.	Documentation
			Number of attendees of pharmacy staff and healthcare professionals per each lecture quarterly.	Documentation
5.	Continuous development	Update the accounting pharmacy annually.		Documentation
		Present the annual plan of the accounting pharmacy system.		Documentation
		Monitor the educational posters and stands for accounting pharmacy at each pharmacy service.	Number of an existed educational posters of accounting pharmacy/total number of education posters.	100%
			Number of an existed educational stands of accounting pharmacy/total number of educational stands.	100%
			Number of accounting pharmacy references and availabilities at each pharmacy unit and healthcare department.	100%
		Take a sample of existing references accounting for pharmacy units and hospitals.	Number of available references/total references available units.	100%

dimension of a fine of accounting and financial activities in pharmacy practice. The pharmacy quality management of the accounting system is required to ensure the medication inventory and cost control, enhance profit, manage the outcome, and avoid any useless financial burden on the pharmacy system. Therefore, the satisfactory requirements of pharmacy quality management of accounting system policy and procedures emphasizing coverage and processes are noticeably encouraged to enforce in Saudi Arabia.

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CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

Consent for Publications

It does not apply to this review

Ethical Approval


This research is exempted from research and ethical committee or an institutional review board (IRB) approval.

<https://www.hhs.gov/ohrp/regulations-and-policy/decision-charts-2018/index.html>

ABBREVIATIONS

TQM: Total Quantity Management; **MOH:** Ministry of Health; **KSA:** Kingdom of Saudi Arabia; **SOCPA:** Saudi Organization for Certified Public Accountants; **AICPA:** American Institute of Certified Public Accountants; **AAA:** American Accounting Association; **IAASB:** The International Auditing and Assurance Standards Board; **IAESB:** The International Accounting Education Standards Board; **IESBA:** The International Ethics Standards Board; **IPSASB:** The International Public Sector Accounting Standards Board; **AGREE:** The Appraisal of Guidelines, Research, and Evaluation.

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