



Computer applications in Pharmacy

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Abstract: In our technologically advanced era, computers are required for all topics, including pharmacy and allied ones. This evaluation primarily focuses on the many computer programs, applications, and uses in pharmacies. Everywhere throughout the pharmacy industry, including pharmacy schools, pharmaceutical companies, research facilities, hospital pharmacies, and many other places, computer science and technology are heavily used. Computer greatly reduces the amount of time, money, and labor needed for any type of task. The creation of numerous software's has made handling large amounts of data simple. In summary, computers are essential to the pharmacy sector; without them, pharmaceutical research would be time-consuming and costly.

Key Word: computer-aided drug design, Computer aided learning.

I. INTRODUCTION

Actionable List of Main Computer Applications in Pharmacy Tips That Work Like a Charm

- ❖ Computer use in a retail pharmacy
- ❖ computer-aided drug design (CADD)
- ❖ Use of Computers in Hospital Pharmacy
- ❖ Data storage and retrieval
- ❖ Information system in Pharmaceutical Industry
- ❖ Diagnostic laboratories
- ❖ Computer aided learning
- ❖ Clinical trial management
- ❖ Adverse drug events control
- ❖ Computers in pharmaceutical formulations
- ❖ Computers in Toxicology and Risk Assessment
- ❖ Computational modelling of drug disposition
- ❖ In Research Publication
- ❖ Digital Libraries

II. METHODS

The internet is a massive data collection. And we can access this info with only one click. The internet is a helpful tool for reviewing literature. Also, accessible online are books.

Online access to many academic journals is simple. [2]

Numerous websites exist that deal with the pharmacy industry. Here are some of these websites:

I. www.phrma.org

Organization that speaks for America firms who conduct pharmacological research provide information on medication research, business news, and wellness manuals.

II. www.healthcareforums.com

Designed to encourage communication between healthcare experts on particular subjects which also covers case discussion and research and other pertinent problems.

III. www.astra.com

This is the ASTRA official website. pharmaceutical companies that manufacture medicines for the cardiovascular, respiratory, and gastrointestinal conditions, as well as to relieve pain. consists of press releases.

IV. www.biogen.com

Organization mostly involved in development genetically modified people pharmaceuticals. with career guidance, information on drugs.

V. www.gene.com

Creates drugs, primarily for the genetic disorder treatment contains a list of the main medications and their applications.

www.genzyme.com

Company with a biotechnology focus and medical supplies. given a career, Information on products and services.

VI. <http://main.pfizer.com/>

Learn more about the research initiatives and employment possibilities at this Pfizer pharmaceutical company. includes a section on pharmaceutical advice and health education.

VII. <http://roche.com>

Roche makes medications and products to address ailments like HIV, obesity, and heart disease. provides news and corporate details.

VIII. <https://pwmirror.pwk.pharmweb.net/pwk/pharmwebk.html>

The US Food and Drug Administration is listed among the international regulating organizations for pharmaceuticals.

IX. www.druginfonet.com

Information on medications, diseases, Medical References / Libraries, Pharmaceutical Manufacturer Information, Healthcare News and Information.

III.DISCUSSION

➤ **When to computerize and how**

Computer technology is rapidly evolving, with devices continuously getting quicker, more powerful, and more affordable.

The advantages of utilizing computers in pharmaceutical management rely on the tools chosen, the dedication to using the technologies, and the capacity to get over the challenges associated in integrating computers into the company. A combination of factors must be present for computerization in pharmaceutical management to be successful; the appropriate combination can have significant advantages.

Some advantages of computerization include—

- ❖ Simplify and expedite difficult tasks
- ❖ Increase accuracy by double-checking computations,
- ❖ spelling, and data integrity;
- ❖ Quickly update and retrieve information;
- ❖ Automate tedious processes;
- ❖ Provide management information for decision-making;
- ❖ Permit operations expansion for enterprises.

Computers do, however, have limitations.

They are unable to take on obligations, make choices, specify issues, establish goals, enhance the availability of the most fundamental data, or help someone become more organized. They are not a one-time cost because monies are needed for ongoing updates, support, and training for both hardware and software. They cannot satisfy needs if the wrong hardware and software are chosen.

The following are some organizational factors that encourage computerization:

- Effective manual processes currently in place
- Other departments that have successfully computerized

➤ **Uses for the Activity Area Planning projects**

- Work schedules
- Simulation software
- Yearly reporting

Making lists of critical medications and selection

- Bibliographic searches

Planning for requirements

- Quantifying pharmaceutical requirements
- ABC evaluation
- Kit volume and weight analyses

Finances and financial management

- Tracking pharmaceutical sales
- Bookkeeping
- Financial evaluation

Purchasing

- Creating Tender Documents
- Tender oversight
- Analysis of bids
- Making purchase orders, as well as obtaining information
- Tracking the progress of orders

Controlling inventories and keeping an eye on stock levels

- Keep track of expiration dates
- Prediction of the dates for reorders and quantities
- Billing.

Transportation

- Vehicle scheduling and routing
- Volume and weight calculations
- Creating transport vouchers

Pharmaceutical controlling and registering

- Registration information database
- Reporting of adverse reactions
- Recalls of medications

Information on medications

- Formulary preparation
- Bibliographic searches
- Transferring and storing data
- Publishing pharmaceutical bulletins
- Creation of instructional materials

Reasonable use

- Standard treatment plan;
- Formulary Analysis of survey data and WHO medicine usage indicators
- Instruction (simulation games)

Charts and graphs are used in presentations.

- Slideshows or overhead transparencies for training
- Communication
- Fax
- Email
- Mail

d• Ensure that hardware and software are compatible.

- Secure local software and hardware support.
- Possess a reliable manual system.

- Ensure proper staff training and participation from personnel in the process of computerization.
- Computerize gradually to give yourself enough time to each action.
- Implement and implement stringent data and equipment security, including surge suppressors, virus scanners, restricted access, and backups.
- Include sufficient finances in your annual budget for maintenance of hardware and software, supplies, and staff education.
- Budget and plan for opportune hardware and software upgrades.

IV. CONCLUSION

In our technologically advanced era, computers are required for all topics, including pharmacy and allied ones. This evaluation primarily focuses on the many computer programmers, applications, and uses in pharmacies. The creation of numerous software's has made handling large amounts of data simple. The internet is a massive data collection. Numerous websites exist that deal with the pharmacy industry. with career guidance.

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