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REVIEW ARTICLE

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Automating Patient Workflows in Salesforce for Healthcare Providers

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ABSTRACT

Large amounts of patient data are complicated and time-consuming to handle effectively in a manual system. In the healthcare sector, strategy additionally boosts the chance of inaccuracy while creating individualized treatment plans for each patient. In order to effectively handle patient data, it was necessary to digitize common or typical procedures associated with the creation of care plans. Automated Workflow Management Systems are designed to create care plans for each patient based on their medical history, physiological parameters, and demands while taking healthcare procedures into account.

Such platforms are created based on technological advancements including AI and ML and aid in the automation of repetitive processes and improve the precision and effectiveness of creating individualized care plans for each patient.

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Workflow, Patient Management, Automation Workflow Management System, Salesforce

Introduction

Medical staff must manage a lot of patient data, and managing that information effectively can occasionally provide serious difficulties. In order to customize treatment strategies to meet the requirements of each patient, it is crucial that patient data be handled effectively. Repetitive duties being automated with cutting-edge technologies like artificial intelligence, and machine learning, especially through robotics can greatly improve patient experiences, performance, and correctness while also making the patient treatment method smoother.

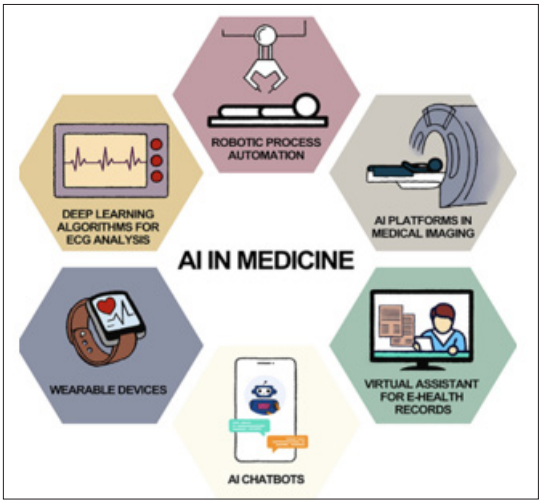

Figure 1: Use of AI in Healthcare [1].

Such technologies can greatly aid in the continual evaluation of patient histories and tracks, which simplifies the customization of care plans for certain individuals. This paper focuses on the various aspects of Salesforce for automating patient care systems and advanced medical systems.

Background

In this age of individualized patient care, physicians must reliably handle customer records and necessary details in order to offer an adapted treatment strategy. Personalized patient regimens are guided by treatment guidelines, which are an invaluable resource. As healthcare professionals have to maintain extensively large amount of data and patient histories for their continual therapies, therefore, conventional methods are not as helpful as AI-centric healthcare systems particularly through the implementation of Salesforce platform.

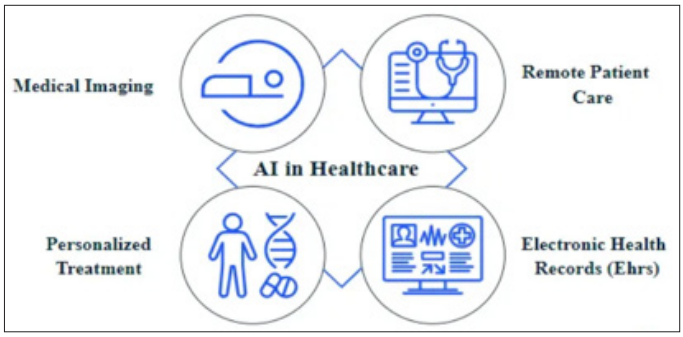

Figure 2: Applications of AI in Patient Care [2].

Still, the conventional approach to processing information was carried out by people and is lengthy and highly vulnerable to errors. Furthermore, it is necessary to comprehend the human evaluation of each patient's data, which occasionally necessitates important management duties and may postpone a patient's diligent care. On the contrary, based on a study of patient information that is now accessible, the use of automated workflow mechanisms and cutting-edge technologies like artificial intelligence and machine learning algorithms including personalized medicine, and medical imaging could be extremely helpful in accurate forecasting of clinical results.

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In-home healthcare offerers Harmony Care integrates its healthcare system with Salesforce Health Cloud for maintaining patients and their care management schemes and chanellizes its services by offering appointment scheduling, and other engagement programs by streamlining all together with AI-based Salesforce [3].

Problem Statement

In healthcare facilities, patient movement can be considerably slowed down by manual procedures. The primary issue is that traditional methods for collecting data and creating customized care plans for every patient are highly ineffective, which could cause bottlenecks in the delivery of care plans. Furthermore, mistakes, duplicate reservations, and inadequate utilization of time slots might result from manual scheduling. However, ineffective staff communication might result in an inadequate level of synchronization in relation to patient care. Payment delays and sluggish claim handling can arise from manual billing. Numerous clinics are using digital solutions, such as integrated EHRs, online patient portals, and automated scheduling systems, to fix these problems. These technologies can boost productivity while boosting patient satisfaction.

Figure 3: Difficulties in Manual Patient Management System [4].

Proposed Solution

Key Features

Salesforce's automated patient workflows improve productivity and patient care by streamlining procedures throughout medical environments.

- **Management of Patients:** Integrated patient records that compile all pertinent information, such as scheduling, health history, and medication regimens.
- **Appointment Booking:** Automatic scheduling systems that let patients quickly make, change, or postpone sessions while receiving email or SMS alerts.
- **Registration Applications:** Online forms that individuals can complete before appointments, cutting down on waiting times and guaranteeing that all relevant data is gathered.
- **Care Adjustment:** Devices for smooth interaction between medical professionals that guarantee all parties who coordinate the treatment of a client have a grasp on similar facts are known as care management resources.

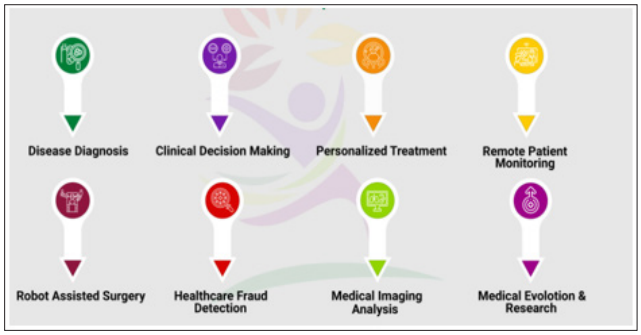

Figure 4: Applications of AI in Medical Settings [5].

- **Follow-Up Automation:** In order to enhance results, automating follow-up actions urges healthcare professionals to stay in touch with patients following appointments or upon completion of medication.
- **Informatics and Reporting:** Data-driven choice-making is made possible by reports and visualizations that monitor the stream of patients, booking patterns, and results.
- **Patient Engagement:** This method is the process of keeping people notified and involved in their care through automated connectivity, for example, schedules, surveys, and instructional resources.
- **Linkage with EHR/EMR:** Providing accurate information entry, and an easy connection with Electronic Medical Records (EMR) or Electronic Health Records (EHR) systems [6].
- **Customized Workflow:** Workflows that may be modified to meet the unique requirements of different medical centers or patient groups while maintaining productivity and applicability are known as customizable procedures.

Implementation Consideration

- **Data Privacy:** In order to improve overall data privacy, fix assessments, firewall execution, data encryption, frequent system checks, and frequent backups of data must all be put in place.
- **Safety Recording:** Tools that use protected storage and transmission of information and inspection to make sure processes follow medical laws and standards, like HIPAA.
- **Staff Training Program:** All medical staff needs to be well aware of the fact of AI-based models for customization and upgradation of healthcare procedures to provide error-free medication to patients through the execution of Salesforce.

Methodology

Systematic Approach to Implementation

- **Process Identification:** It is necessary to choose automated procedures.
- **Structuring Workflow:** Hospitals could first use small-scale incorporation to keep costs down. Once they see positive outcomes generated by the AI-driven medical plan framework, they may move on to larger-scale adoption [7].
- **Outlining Aim:** In order to create timely and precise treatment

plans that are tailored to each patient, the objectives are expected to improve the exactness of analyzing information and client information processing.

- **Selection of Software:** It is another important segment for medical facilities and here they must choose an AI-centered Salesforce system for automating all medical processes.
- **Comparing based on KPIs:** Implemented programs need to be always compared with standards of medication.
- **Continuous Monitoring:** Collecting feedback from patients is required to keep going and updated.

Results and Discussion

- Automation technology will improve the steps for organizing and evaluating data, which could boost the precision of creating care plans [8].
- The effectiveness of therapies will be enhanced more by the timely creation of care plans that make use of patient data.
- Individual wellness planning automation will improve ultimate patient care by cutting down on administrative efforts and delays.

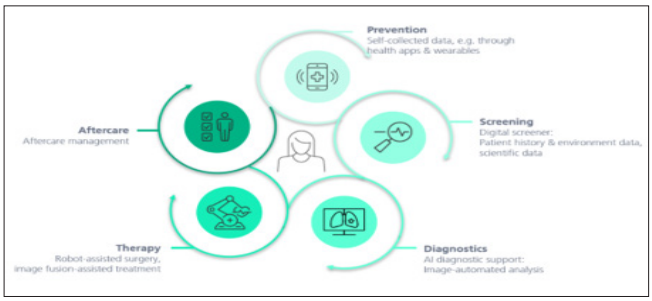

Figure 5: Processes of Automation Patient Workflow [9].

Conclusion

Technological advances like artificial intelligence, machine learning, and data analytics must be used to optimize medical establishments' workflow as a way to address the problems associated with manual patient data processing and evaluation methods. Correct examination, the creation of treatment plans, and the efficient management of patient data are all going to profit from this.

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