



Performance Test Strategy for Integrated Health systems

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Introduction:

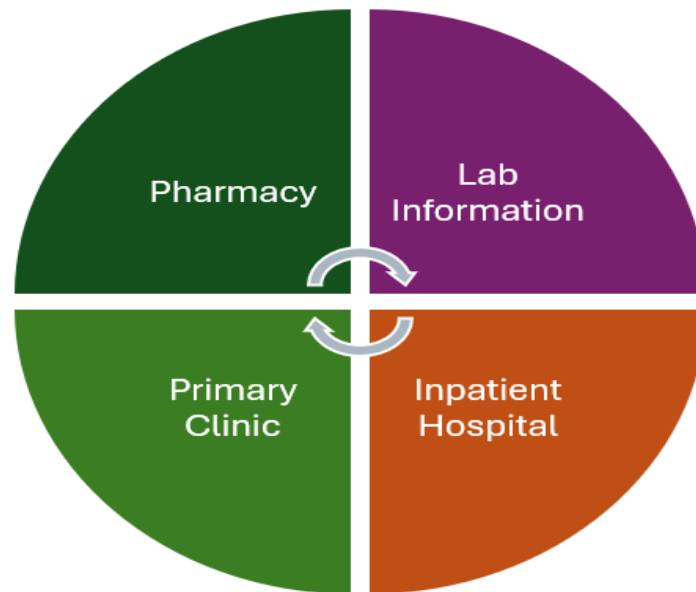
Health Care plays a vital role in people's life, Health Care involves Insurance providers, doctors and members who are getting benefited from them when there is an life saving event. People having a Insurance with good network of providers will have a peace of mind by having a good life style, they can have yearly physical examination, preventative care, mental wellness support. The term Integrated Health Care refers to collaboration between health professionals to provide complete treatment to patients and improve overall wellbeing. These integrated behavioral health practices around the country feature psychologists and physicians working together in pediatric, obstetric/gynecological and family practice settings around the country. According to American Psychological Association, "As early as 1964, the president of the American Academy of Pediatrics suggested that every pediatrics office should have a child psychologist (Wilson, 1964)". New models of integrating mental health services into pediatrics and primary care practices have emerged, and psychologists are uniquely equipped to be an integral part of such teams. Performance Testing for the Health Care with the integrated Systems will enhance the end user experience.

Keywords: Integrated Health Care, performance Testing, Health Care, Benefits of Performance testing

Integrated Health Care Systems:

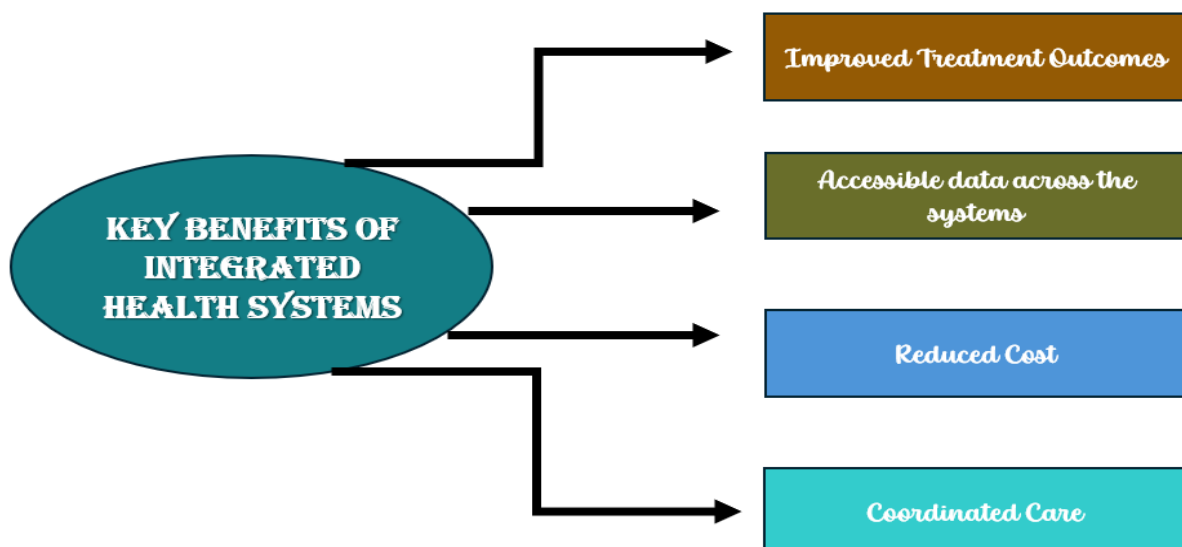
Integrated Health Care Systems often referred to as interprofessional Health care is an approach characterized by a high intensity of collaboration and communication among health professionals. The integration is not only with the health care professionals it will extend with Insurance, Inpatient Hospitals, Pharmacy, Laboratory Works etc.. Integrated Health Care systems is essential as the information related to the patient care is shared among the team members to establish a comprehensive treatment plan.

The integrated health care systems includes diverse group of members physicians, nurses, specialists, insurance providers, radiologist, pharmacists.



Benefits of Integrated Health Care System:

Integrated Health care system provides various benefits by providing the information shared across different health care services for a better treatment plan.



Improved Treatment Outcomes:

Integrated Health Care systems help to treat the patients end to end needs by tracking the necessary care after the treatment like referring a physiotherapy after an surgery or providing the counselling to overcome the trauma by referring a psychiatrist.

Accessible data across the system:

As the data is being centralized in the Integrated Health Care Systems, it helps the physicians, nurses and providers to access the necessary information of the patient at any point of time. This reduces the time and waiting for the results or booking for an appointment with the lab.

Reduced Costs:

Integrated Health systems helps to reduce the administrative cost as the data is shared and maintained across the systems. The repetitive tests, procedures can be avoided as the information of the patient is shared. Integrated Health Care provides a preventive care which will reduce the over all utilization of services.

Coordinated Care:

With the help of Integrated Health care Systems, the coordination between the physicians, nurses, specialists, radiologists and insurances is becoming easier. With the help of coordinated care, we are able to achieve enhanced patient outcome.

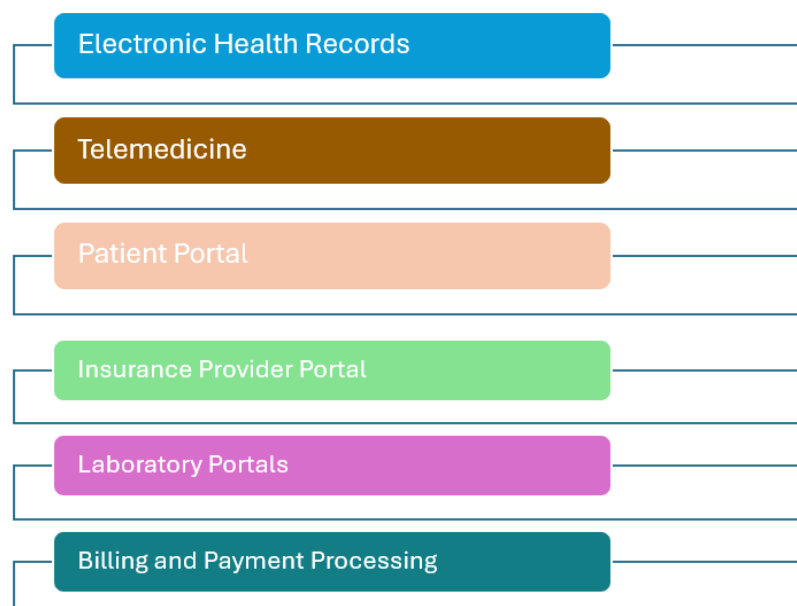
Core Components to focus for Performance Testing an Integrated Health Care Systems:

Performance Testing:

Performance testing helps us to analyze how well the over all system behaves under various conditions like huge load, volume, and evaluate the response time, throughput, scalability to provide a better user experience.

Core components to consider for Integrated Health Care Systems:

We have to come up with a performance testing strategy considering below core components of the Integrated Health Care Systems.



Performance Test Strategy:

Performance Test Strategy outlines the high level plans of what and how we are going to achieve the testing for Integrated Health Care Systems. It serves as a roadmap for the organization to ensure all the features of performance are evaluated. It provides a clear framework for the testing team on the process to follow and reduce the risk of missing any critical performance issues.

- Define the Scope
- Identify the Environment
- Test Scenario Execution
- Monitoring and Analysis
- Sharing the results to stake holders

Define the Scope:

As the Integrated Health Care System involves with different components and system, we must understand the overall architecture of the integrated system and identify the portals, databases, batch that involves in the integration and define the key scenarios that needs to be performance tested.

Identify the Environment:

We must identify the environment and data that we can use for performance testing the integrated Health Care System. The performance test environment should reflect the production like environment, as the Integrated Health System involves different system and database.

Test Scenario Execution:

The test scenarios should be created in such a way it should be satisfying all the Integrated Systems like patient portal, provider portal, Insurance portal, Radiologist portal etc.. Different types of performance testing like load, volume, scalability, endurance and stress testing.

Monitoring and Analysis:

Monitor the performance of the application for their response time, throughput, scalability, resources utilization and if any issues are observed identify the root cause and prepare the detailed test report.

Share the results to Stakeholders:

Based on the analysis and the report provide walkthrough to the stake holders and come up with the mitigation plan for the issues /bottlenecks identified.

Disadvantages of not conducting performance testing:

Approving an Integrated Health Care Systems for production release without performance testing will lead to potential risks. The potential risks could be system downtime, poor user experience, Data Integrity issues, scalability problems, Business loss.

Conclusion:



We have discussed on the advantages of the Integrated Health care system that provides an Improved Treatment Outcome, Accessible data across the system, Reduced Cost, Coordinated Care. The Integrated Health Systems involve multiple core components Electronic Health records, Tele Communications, Patient portal, Insurance provider portal, Laboratory portal, Billing & Payment processing, Claims Processing there will lot of challenges in the integration from the database, architecture and different Technologies used. As the Integrated Health Care System provides a phenomenal benefit to the patient, it is highly recommended to performance test the Integrated Health Care systems by having performance strategy to ensure all the scope and critical scenarios are covered. The health care system plays an important role in individual life the necessity of making the system highly accessible and improved performance remains to be starker.

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