

# **ABOUT APPLICATION**



An educational electronic health record (EHR) for Nursing introduces students to digital charting. They are equipped to correctly document care in the contemporary clinical setting thanks to this technology and the Nursing Educational EHR for the Medical Office.

This is achieved by giving students a controlled, yet realistic, means of mastering computerised charting, exhibiting clinical judgement in patient care, and thriving in healthcare settings.

### APPLICATION OFFERING

- Nursing Clinical Simulation
- Study Resources
- Assignment Tools
- CEU's for Nurses
- Record Maintanance

32.24%

SERVICE RESULT

Data collected based on the 1,000 students during the run time and publication phase.

# **OBJECTIVE**

The reason of team to develop an educational electronic health record (EHR) is to provide a platform for healthcare education and training while utilizing the benefits of electronic health records. It aims to enhance the learning experience of healthcare professionals, students, and researchers by offering a simulated or real-world environment to interact with patient data and practice clinical decision-making.

A few of the objectives that the Project Perspectives team figured to achieve were:

#### **Training and Skill Development**

This Nursing Educational EHR allows students and healthcare professionals to practice using EHR systems and develop proficiency in recording, retrieving, and managing patient information. It provides a safe and controlled environment for learners to gain practical experience without risking patient safety.

### **Clinical Decision-Making**

By integrating clinical scenarios and patient cases into the educational EHR, learners can engage in realistic decision-making processes. They can review patient histories, perform assessments, make diagnoses, and develop treatment plans.

# **Interprofessional Collaboration**

This Nursing EHR facilitate collaboration among different healthcare disciplines. Students from various fields, such as medicine, nursing, pharmacy, and allied health professions, can work together in a virtual healthcare setting, enhancing their understanding of interdisciplinary care and teamwork.

#### **Research and Analysis**

This EHR can be used as platform for conducting research and analysing healthcare data. Students and researchers can explore trends, conduct data analysis, and generate reports to gain insights into patient outcomes, quality improvement, and population health.

#### **Continual Learning and Professional Development**

This EHR serves as a lifelong learning tool for healthcare professionals. It allows them to stay updated with the latest medical knowledge, guidelines, and best practices.

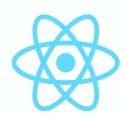
#### **Ethical and Legal Considerations**

This provide an opportunity to introduce learners to the ethical and legal aspects of health information management. They can explore topics such as patient privacy, data security, informed consent, and compliance with regulations like HIPAA (Health Insurance Portability and Accountability Act).

Overall, the objective of this Nursing EHR is to bridge the gap between theory and practice, facilitate experiential learning, and empower healthcare professionals and students with the necessary skills and knowledge to deliver high-quality care in a digital healthcare environment.

# **TECHNOLOGY**









# SOLUTION

The techbit team spent a good time implementing an EHR because it requires careful consideration and planning. Team Techbit designed a systematic approach to achieve the goal to develop the application for the best results. Here are some potential solutions for developing and utilizing an educational EHR effectively:

### User-friendly Inerface

Design User-friendly interface that is easy to navigate.



#### **Teamwork**

This allows learners to work together on patient cases and so on.



### **Faculty Support**

It covers systems functionalities, case development.



### Evaluation & improve

Regularly evaluate the effectiveness of educational EHR.



Below are some potential solutions team took care while developing and utilizing this Nursing EHR as an educational EHR:

#### User-Friendly Interface

The team ensure that learners can quickly access patient information, input data, and interact with the system seamlessly. Consider incorporating features like customizable templates and clinical decision support tools to aid learners in documentation and decision-making.

#### Integration with Curriculum

Team align the educational EHR with the existing curriculum or learning objectives of the educational institution. Integrate patient cases, clinical scenarios, and learning modules that correspond to the topics being taught. This helps reinforce classroom learning and allows students to apply their knowledge in a practical setting.

#### **Analytics and Reporting**

Techbit team Build analytical capabilities into the educational EHR to generate reports and provide feedback to learners and instructors. Analytics can help track learner progress, identify areas for improvement, and assess competency development. Reporting features can provide insights on performance, clinical outcomes, and quality improvement measures.

#### Collaboration and Communication

Team-built collaborated and communicational features within the educational EHR. This allows learners to work together on patient cases, share information, discuss treatment plans, and engage in interprofessional communication. Features like messaging, discussion.

#### Faculty Support and Training

New feature provided to faculty members and instructors with comprehensive training on how to use and effectively utilize the educational EHR. This EHR offer ongoing support and resources to address any technical or instructional challenges they may encounter. Faculty training covers system functionalities, case development, assessment tools, and best practices for incorporating the EHR into the curriculum.

#### Data Privacy and Security

The team ensured EHR will be under strict data privacy and security measures to protect patient information and comply with relevant regulations (e.g., HIPAA). Implement robust authentication, access controls, and data encryption protocols to safeguard sensitive data within the educational EHR.

# **Evaluation and Continuous Improvement**

Team build this Nursing Educational EHR in a way to keep the regular evaluation the educational EHR through feedback from learners, faculty, and other stakeholders. Use this feedback to make iterative improvements to the system, address any usability issues, and enhance the overall learning experience.

By implementing these solutions, an educational EHR can serve as a valuable tool for healthcare education, training, and professional development, facilitating effective learning and preparing healthcare professionals for real-world practice.

# **CHALLENGES**

While an educational electronic health record (EHR) offers numerous benefits, there are also several challenges that need to be addressed. Some common challenges of implementing and utilizing an educational EHR include

#### **Technical Infrastructure**

Setting up and maintaining the technical infrastructure required for an educational EHR is complex and resource-intensive. It involves acquiring and maintaining hardware, software, databases, and networking capabilities that can support the EHR system and handle the data volume generated by learners.

#### Cost

Implementation of Nursing EHR was involve significant costs, including software licensing, hardware acquisition, system maintenance, data storage, and ongoing technical support. Educational institutions or healthcare organizations may need to allocate adequate financial resources to ensure the successful implementation and sustainability of the EHR.

#### Training and Support

Team designed the program for Proper training and support for faculty, staff, and learners are crucial for the effective use of an educational EHR. Faculty members need training on how to incorporate the EHR into the curriculum, create relevant learning activities, and guide learners in using the system. Learners also require comprehensive training to navigate the EHR interface and understand its functionalities.

#### Data Integration and Standardization

Integrating Nursing Educational EHR with other systems was complex, integrations such as electronic medical records or laboratory systems, was challenging. Data standardization, interoperability, and ensuring accurate and timely data exchange between systems were important but complex task. Lack of standardization was lead to data inconsistencies and hinder the seamless integration of patient information into the educational EHR.

### Privacy and Security

This Nursing Educational EHR involved handling and accessing sensitive patient data, which must be protected to ensure patient privacy and comply with legal and ethical requirements. Implementing robust security measures, such as encryption, access controls, and user authentication, is crucial to safeguarding patient information and preventing unauthorized access or data breaches.

Addressing these challenges Techbit maintains collaboration among stakeholders, effective planning, ongoing support, and continuous evaluation to ensure that the educational EHR optimally supports the learning goals and provides a valuable educational experience for healthcare professionals and students.

# **BENEFITS**

This Nursing EHR combined with electronic health records (EHR) was built with intended to offer several benefits to healthcare providers, student nurses, and patients. Below are some of the advantages:



Firstly, This Nursing Educational EHR enhances patient safety by providing nurses with instant access to accurate and up-to-date patient information, allowing them to make informed decisions and reduce the risk of medication errors. Additionally, EHR systems streamline the documentation process, saving time and minimizing errors associated with manual charting. Through improved care coordination, nurses can easily communicate and collaborate with other healthcare professionals, ensuring seamless and efficient patient care.

Furthermore, nursing education on EHR equips nurses with the skills to access evidence-based guidelines and best practices, promoting high-quality care and improved patient outcomes. EHR also enable data-driven decision-making by collecting and analyzing patient data, empowering nurses to assess outcomes and contribute to quality improvement initiatives. Moreover, the integration of EHR systems in nursing education enhances patient engagement by providing portals for patients to access their health information and actively participate in their care.

#### Benefits;

- Help nursing students become proficient in patient documentation.
- Enhance classroom learning and provide ways to introduce more patientcentred or case-based activities.
- Help nursing students fulfil their graduation requirements for EHR practice.
- Add another level of realism to patient simulation scenarios as students learn to care for patients.
- Offer the ability to customize scenarios to allow students to recognize important indicators within a patient chart that will affect patient outcomes.
- Teach students how to evaluate and document patient care within an electronic health record and prepare students for any EHR that they may encounter in practice.

This EHR also streamlines workflow processes, reduces paperwork, and increases overall productivity. Lastly, nursing education on EHR opens up opportunities for research and population health management, allowing nurses to contribute to studies, analyze data, and inform public health strategies. In all, nursing education combined with EHR systems offers an array of benefits, including improved patient safety, efficient documentation, enhanced care coordination, evidence-based practice, data-driven decision-making, patient engagement, streamlined workflow, and research opportunities.



Copyright Techbit Solutions Pvt Ltd. INDIA

Techbit Solutions Software Group C 203, Phase 8B, World Tech Tower, Industrial Area, Sahibzada Ajit Singh, Mohali (Punjab) INDIA

Document of Techbit and Generated in Mohali India.

This document is current as of the initial date of the publication and may be changed by Techbit at any time. Not all the offering will be provided very instant but will be allocated based on the in-dependability of team Actual performance results may very depending on specific configuration and operation condition. For more you can contact on: info@techbitsolution.com

THIS INFORMATION IN THIS DOCUMENT IS PROVIDED "AS IS" WITHOUT ANY WARRANTY, EXPRESS OR IMPLIED, INCLUDING WITHOUT ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND ANY WARRANTY OR CONDITION OF NON-INFRINGEMENT.

Techbit Solutions are services according to the terms and conditions of the agreements under which they are provided.



