

## APP FOR PEDIATRIC CHRONIC CARE

**Batch Number:12**

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# Introduction

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- Creating an app for pediatric chronic care is valuable and initiative.our app can help healthcare providers,parents and care givers and it can help to improve the management of chronic care conditions mainly in childrens.
- The Pediatric Chronic Care Clinic works with children who have chronic or complex medical problems.
- Pediatric is nothing but healer of children.chronic care is nothing but a disease continuing for a long time or pre existing.
- Children with chronic health conditions may have some activity limitations, frequent pain or discomfort, abnormal growth and development, and more hospitalizations.

# Literature Review

S.No	Title of the project & year	Authors	Journal/conference	Published in	advantages	disadvantages
1.	<b>BrainTracker: mHealth app for Remote Assessment of Pediatric Epilepsy and Comorbidities,2020</b>	Kevin Gary, Mason Cole, Dipak Purbey, Meng-Jung Lin Krishnakantha Jayashree Chandrasekhar	IEEE publisher	2020	a. We have developed a mobile health application) with tasks and surveys that target areas of functioning that are commonly at risk in children across medical disorders	a. Not all patients have access to smartphones or the internet, potentially creating healthcare disparities.

# Literature Review

S.No	Title of the project & year	Authors	Journal /conference	Published in	advantages	disadvantages
2.	<b>Integrating Patient-Generated Observations of Daily Living into Pediatric Cancer Care: A Formative User Interface Design Study,2018</b>	Udaya Lakshmi, Mathew hong,Lauren wilcox	IEEE publisher	2018	a. prior work largely focuses on capturing clinician-defined, patient-generated data in adult oncology care.	a. Patient-entered data may not always be accurate or complete, leading to potential inaccuracies in treatment decisions

# Literature review:

S. No	Title of the project & year	Authors	Journal /conference	Published in	advantages	disadvantages
3.	<b>An mHealth System for Toxicity Monitoring of Paediatric Oncological Patients using Near Field Communication Technology,2015</b>	Katharina Duregger, Dieter Hayn, Jürgen Morak, Ruth Ladenstein and Günter Schreier	IEEE publisher	2015	a.A pre-existing telemonitoring system for elderly, chronically ill patients [13-15] has been extended and adapted in order to fulfil the requirements of paediatric oncological settings.	a.The uncertainty associated with the long-term prognosis of chronic conditions can create anxiety for both children and their families.

# Proposed Method

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- **Appointment scheduling**: include a scheduling system for doctor's appointments and follow-ups, with automated reminders.
- **Medication management**: enable medication reminders, dosage tracking and prescription refills to ensure proper treatment adherence.
- **Secure health records**: medical information or medical reports, ensuring that only trusted people, such as doctors, can access it for your care.
- **Symptom tracking** : keeping a record of how you feel and any changes in your body, like writing down when you have pain or other health issues.
- **Emergency assistance**: when you get quick help during a serious and unexpected situation, like when something bad happens, and you need immediate support.

# Objectives

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- **Appointment Reminders:** Send reminders for medical appointments, therapy sessions, or specialist visits.
- **Medication management:** Help parents and caregivers track medication schedules, dosages, and any potential side effects.
- **Secure health records:** medical information or medical reports, ensuring that only trusted people, such as doctors, can access it for your care.
- **Improved doctor-patient communication:** facilitate communication between healthcare providers, children and their parents for better care coordination.
- **Symptom tracking :** keeping a record of how you feel and any changes in your body, like writing down when you have pain or other health issues.

# Methodology

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- The methodology for developing a pediatric chronic care app involves steps such as research, design, development, testing, and continuous improvement.
- while ensuring alignment with healthcare regulations, collaboration with healthcare professionals, and user feedback integration to create a comprehensive and effective solution.





# Timeline of Project

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## Phase 1: Project Commencement and Setup

- 9<sup>th</sup> October : Project Launch
- 10<sup>th</sup> October : Preliminary Research and Data Gathering
- 11<sup>th</sup> October : Project Planning and Blueprint Creation

## Phase 2: Development and Quality Assurance

- 11<sup>th</sup> October : System Development
- 12<sup>th</sup> October : Testing and Quality Assurance

## Phase 3: Deployment, Evaluation, and Conclusion

- 12<sup>th</sup> October : Deployment and Performance Assessment
- 12<sup>th</sup> October : Refinement and Documentation
- 13<sup>th</sup> October : Presentation and Knowledge Transfer

# Expected Outcomes

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- **Improved Health Management:** The app can help parents and caregivers better manage their child's chronic condition by providing tools for tracking medications, symptoms, and appointments.
- **Enhanced Communication:** Facilitating communication between parents, caregivers, and healthcare providers can lead to more coordinated care and quicker responses to any issues that may arise.
- **Education and Awareness:** The app can offer educational resources to parents and caregivers, helping them understand the condition better and promoting awareness of necessary care measures.
- **Better Adherence:** Improved adherence to treatment plans can be achieved through medication reminders and educational content, resulting in better health outcomes.

# Conclusion

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- a pediatric chronic care app is a valuable tool for helping children with ongoing health issues and their caregivers.
- It makes it easier to manage symptoms, take medications on time, and stay connected with doctors.
- The app is like a helpful friend that ensures children get the best care possible.



# References

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- J.J. Collins, M.E. Byrnes, I.J. Dunkel, J. Lapin, T. Nadel, H.T. Thaler, T. Polyak, B. Rapkin, R.K. Portenoy, The Measurement of Symptoms in Children with Cancer, *J. Pain Symptom Manage.* 19 (2018) 363–377.
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# Thank You



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