



# Blow Comsetion of Asthma using IoT

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## ABSTRACT

*Asthma management is crucial for individuals with respiratory conditions. This project introduces a "Smart Inhaler with Asthma Monitoring System" utilizing a flow sensor and Telegram for real-time monitoring. The system aims to enhance asthma care by measuring inhalation flow rates using a flow sensor and providing instant updates and alerts via Telegram. This integration of a flow sensor and a communication platform offers an intelligent solution for monitoring and managing asthma symptoms.*

**Keywords:** Flow Sensor, Buzzer, Thing Speak ,Telegram Platfarm, Microcontroller Unit

## 1. INTRODUCTION

Asthma management is crucial for individuals with respiratory conditions. This project introduces a "Smart Inhaler with Asthma Monitoring System" utilizing a flow sensor and Telegram for real-time monitoring. The system aims to enhance asthma care by measuring inhalation flow rates using a flow sensor and providing instant updates and alerts via Telegram. This integration of a flow sensor and a communication platform offers an intelligent solution for monitoring and managing asthma symptoms. Traditional inhalers lack the capability to provide real-time feedback on inhalation techniques and asthma symptoms. Asthma patients often face challenges in self-monitoring and may not receive timely alerts or guidance. An intelligent system is needed to enhance inhaler usage and provide personalized monitoring for better asthma management. The Smart

Inhaler with Asthma Monitoring System incorporates a flow sensor to measure inhalation flow rates during medication usage. The collected data is transmitted to Telegram, allowing users to receive instant updates on their inhalation techniques, medication adherence, and potential symptom triggers. This intelligent system aims to empower asthma patients with real-time information for proactive symptom management.

## 2.COMPONENTS:

### Hardware Tools:

1. **Flow Sensor:** - Measures inhalation flow rates to provide real-time feedback on inhaler usage



2. **Microcontroller Unit:** Utilizes a microcontroller for data processing and communication with Telegram



5. **Thing speak integration:** It shows the graph of the asthma of a patient.



3 **Telegram Platform:** Integrates with the Telegram platform for real-time updates and alerts.



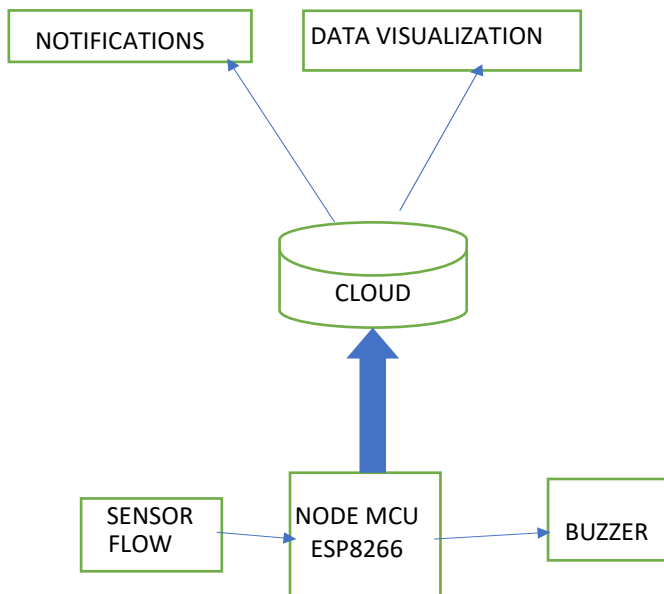
**Software Tools:**

a. **Microcontroller Programming:**

- Programs a microcontroller to process data from the flow sensor and communicate with Telegram.

b. **Architecture of Blow Comsetion of Asthma:**

4. **Buzzer:** It makes sound when it reaches the value.



### 3. CONCLUSION

There is a need to track the breath readings of the asthma patients to check the condition of the patient. By using smart inhaler with asthma monitoring system decreases the cause of deaths due to asthma. It predicts the patient condition before the problem.

### Conflict of interest statement

Authors declare that they do not have any conflict of interest.

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