

# The Correlation Between Healthcare & Wireless Bluetooth Devices

Aleysia Brooks, Tanya Lucik, BSN, RN  
Cleveland Clinic

Civic Education  
Nursing Care  
Internship Program

## Hypothesis

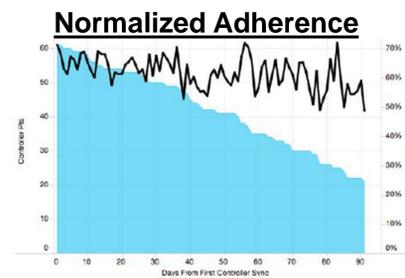
- Bluetooth monitoring devices allow healthcare providers to become more effective and efficient in their care of patients.
- They also allow patients to benefit from a higher quality of life.



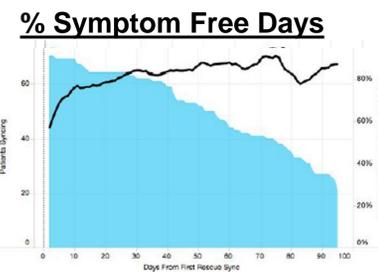
## Methodology

- Information was collected about Propeller Health to prove the hypothesis.
- A paper survey was given to care providers who were involved in the use of Propeller. They were asked to share their standpoints on its usefulness, explain how they incorporate the patient data into their jobs, and calculate how many of their patients have actually benefitted from its use.

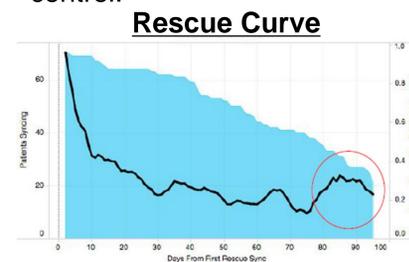
## Data



- Adherence to controller/daily medications is important to improve and maintain asthma control over time.



- As the frequency of rescue use decreased and adherence increased, we expected patients to demonstrate a greater level of control.



- The frequency of rescue inhaler use represents one of the most valuable indicators of exacerbation and resulting health care utilization.

**Legend:**  
Blue = All patients between first and last sync of rescue inhaler  
Black = Rescue trend

## Results

### Out of 10 people surveyed results show :

- 100% of people surveyed felt that Propeller Health was useful for asthmatic patients.
- Perceived improvement in asthma symptoms for patients using Propeller Health.
- The number of asthmatic related hospital visits decreased for patients using Propeller Health.
- Healthcare providers felt that Propeller Health helped non-adherent patients increase adherence.
- Data collected from Propeller Health were recorded in electronic medical record and used for patient education, follow up phone calls, adherence questions, and other purposes.

### Questionnaire

#### Propeller Health Questionnaire

1. Do you feel Propeller Health is useful for asthmatic patients?
  - a. Yes
  - b. No
2. Would you say that the patients that use Propeller Health improved their asthma within the last three months?
  - a. Yes
  - b. No
3. Were the number of asthmatic related hospital visits increased or decreased?
  - a. Increased
  - b. Decreased
4. Do you feel Propeller has helped your non-adherent patients become better controlled?
  - a. Yes
  - b. No
5. How many patients are enrolled in Propeller Health?
6. Would you recommend Propeller Health for asthmatic patients?
  - a. Yes
  - b. No
7. How do you use the information you get from Propeller Health?

## Conclusions

- Wireless Bluetooth devices play a large role in healthcare. Caregivers are able to gain insight on their patients' information with just a touch of a button. Follow-up appointments are completed more quickly because severe issues have already been addressed, so the care providers are able to refer to the data they've received on their computer screens.

## Recommendations

- The pharmacy could create an app to make patients aware of when their prescriptions have been approved, refilled, and are ready, and can also provide updates on more medication-related topics.
- More offices should utilize these types of devices to improve medication adherence for their patients.