In our modern world

More than 500 asthma-related apps are currently available.[1]

96% of 18-29 year old adults own a smartphone.[2]

81% of American adults own a smartphone.[2]

mHealth & an asthma App can help you

Puts you in the driver's seat with the care of your asthma[1]

Teach and give warnings to avoid asthma attacks

Alert when you may experience increased symptoms due to the world around you

More feedback can lead to better asthma control.

Track symptoms to see if your asthma is getting better or worse

Choosing the right app

Keep these points in mind since most mHealth and apps are not regulated by the FDA.[4]

✓ Apps which track location have the greatest risk of loss of privacy.[1]

✓ Is the purpose of the app clear?

✓ Does the app share information with other companies?

✓ It should use a test or ask questions, like your doctor does, to check your asthma control.[3]

MONTANA ASTHMA CONTROL PROGRAM
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References

[1] Himes, B., Leszinsky, L., Walsh, R., Hepner, H., Wu, A. (2019, November). Mobile health and inhaler-based monitoring devices for asthma management. *Journal of Allergy and Clinical Immunology: In Practice, 7*(8), 2535-2543, doi: 10.1016/j.jaip.2019.08.034.

[2] Pew Research Center. (2019, June). Mobile fact sheet. Retrieved from: https://www.pewresearch.org/internet/fact-sheet/mobile/

[3] Kagen, S. & Garland, A. (2019, February). Asthma and allergy mobile apps in 2018. *Current Asthma and Allergy Reports, 19*(1). doi: 10.1007/s11882-019-0840-z

[4] Kiss myAsthma. (n.d.) Retrieved from: https://kissmyasthma.org.au/about/

[5] Tinschert, P., Jakob, R., Barata, F., Kramer, J., Kowatsch, T. (2017, February). The potential of mobile apps for improving asthma self-management: A review of publicly available and well-adopted asthma apps. *JMIR mHealth and uHealth, 5*(8). doi:10.2196/mhealth.7177

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Management of Asthma

Through Mobile Health (mHealth) and Apps

Learn how to safely monitor your health

MONTANA DPHHS
Healthy People. *Healthy Communities.*
Department of Public Health & Human Services

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Understanding the Options

Sensor

A device that is attached to the medicine you breathe.[1]

Sends information to apps or to your doctor.

People who use sensors tend to have better asthma control results, take medicine regularly, and reduce overall costs.

App

An application or "app"can be put on your cell phone or tablet.

Can record symptoms and what may have caused them (triggers).

Provide reminders to take your medicine.

Display alerts, based on where you are located, to help avoid triggers and predict when symptoms may be worse.

Digital Inhaler

An inhaler which has sensors built into it instead of attaching on it.

One FDA-approved digital inhaler, which pairs with an app, is available. Your doctor can prescribe this.

It can be used to record when you use your inhaler and measures the flow of air when you inhale your medicine.

How They Help

Each person can use these in their own way to make needed changes and follow plans to improve asthma control. [1]

Combining a sensor and an app can record:

Audio of inhaler use, to tell if it was done correctly.

Date, time, and number of puffs taken.

When you forget to take your medicine.

Location, by using the GPS in your phone or tablet.

Symptoms, these can be recorded on their own and do not need to be entered by a person.

Consider using mHealth and an app to help your asthma control.

The MT Asthma Control Program does not endorse or support any apps. However, these have been researched in academic studies and may benefit you.

mHealth & Apps That May Help

Pairing sensors and apps

Propeller Health
Uses a sensor to record date, time, and location of inhaler use. Can be used with the Propeller Health app.[3]

Hailie
Hailie makes a range of sensors which are all used with the Hailie app.

Smart Track
Uses a sensor to record date, time, location, missed doses, and number of puffs. Can be used with the Hailie app.

App only

AsthmaMD
Logs and tracks triggers, symptoms, when you use your medicines, peak flow meter readings, and notes.

Wizdy Pets
Using games, this app teaches and engages kids in the care of their asthma.[4]

KissmyAsthma
Designed by and aimed to engage young people in self management and education. [4]