

#InspiringKids

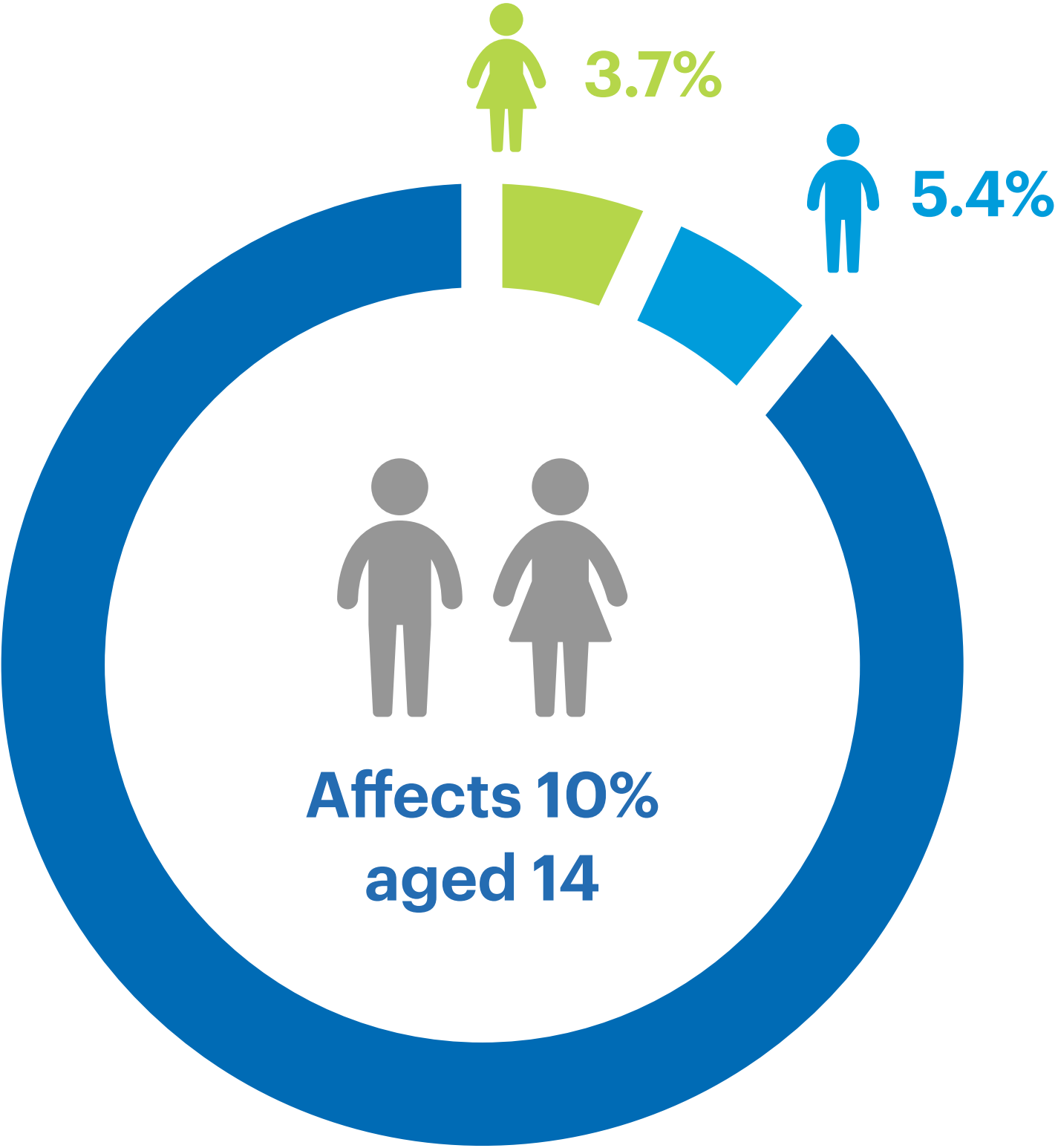
# HappyAir Community

Staying on Top of Asthma  
Lovexair Foundation



Childhood Asthma: Prevalence

Spain 2017



Severe uncontrolled Asthma is **less than 5%** in children's population yet uses 2x more Healthcare service resources.



**50%** Children who are referred to specialists for diagnosis & assessment are due to **poor disease-management.**

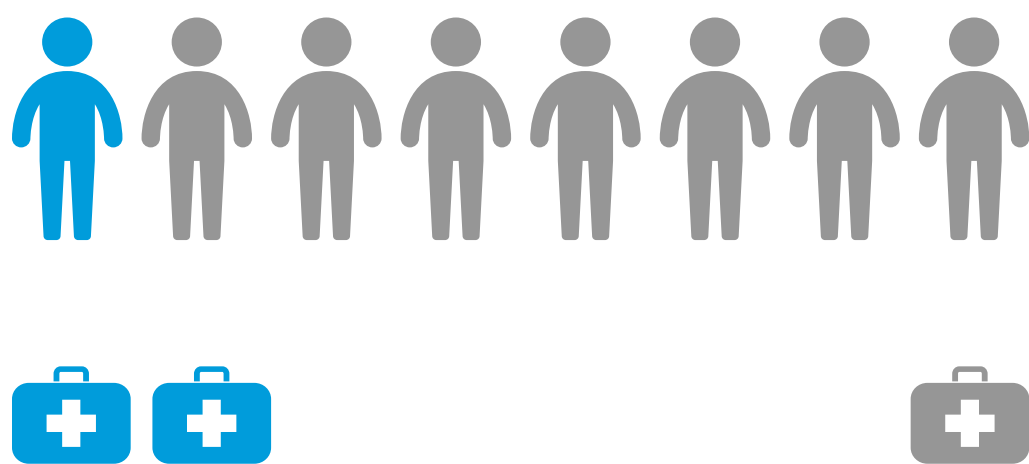
## Severe Asthma in Children: Hospital Admissions

Spain 2017



## Severe Asthma in Children: Healthcare expenditure

**1 in 8 Children have a limited lifestyle:**  
They visit their GP 1.9 x more than other children.  
2.2 x more to emergency services and have 3.5 more hospital admissions.



1. Grant Sanofi 2020 (10.000 Eur).
2. Grant SEPAR Spanish Pulmonary Society (12.000 Eur).
3. Ethics Committee Approval from all participating centres has been obtained.
4. In conversations with industry partners to monitor lung function and medication adherence.
5. HappyAir resources in development August-November.

## Get involved:

### Your role in supporting & protecting youngsters health in the COVID-19 era.

1. Step in and help motivate future generations who stick to their care plan and doctor's recommendations.
2. You can contribute to young people's health & lifestyle, so that they can live more happily, no matter what happens.
3. What we are asking for: **funding, activities, experiences which reward people's efforts.**
4. Healthcare professionals, families & young people need your support.





**Arran Strong**  
HappyAir Ambassador

**Happiness** is a state of mind felt by people who feel fully satisfied for making the most of what they wish for in life, or enjoying something which feels good.

We should all live like this! Health and well-being are our gifts, we have to protect and appreciate them.

**I do it every day.**

If children live more happily and understand how important it is, to take care of themselves, they can also live their dreams, with confidence and joy, have more active lives and enjoy their childhood.



# The Challenge

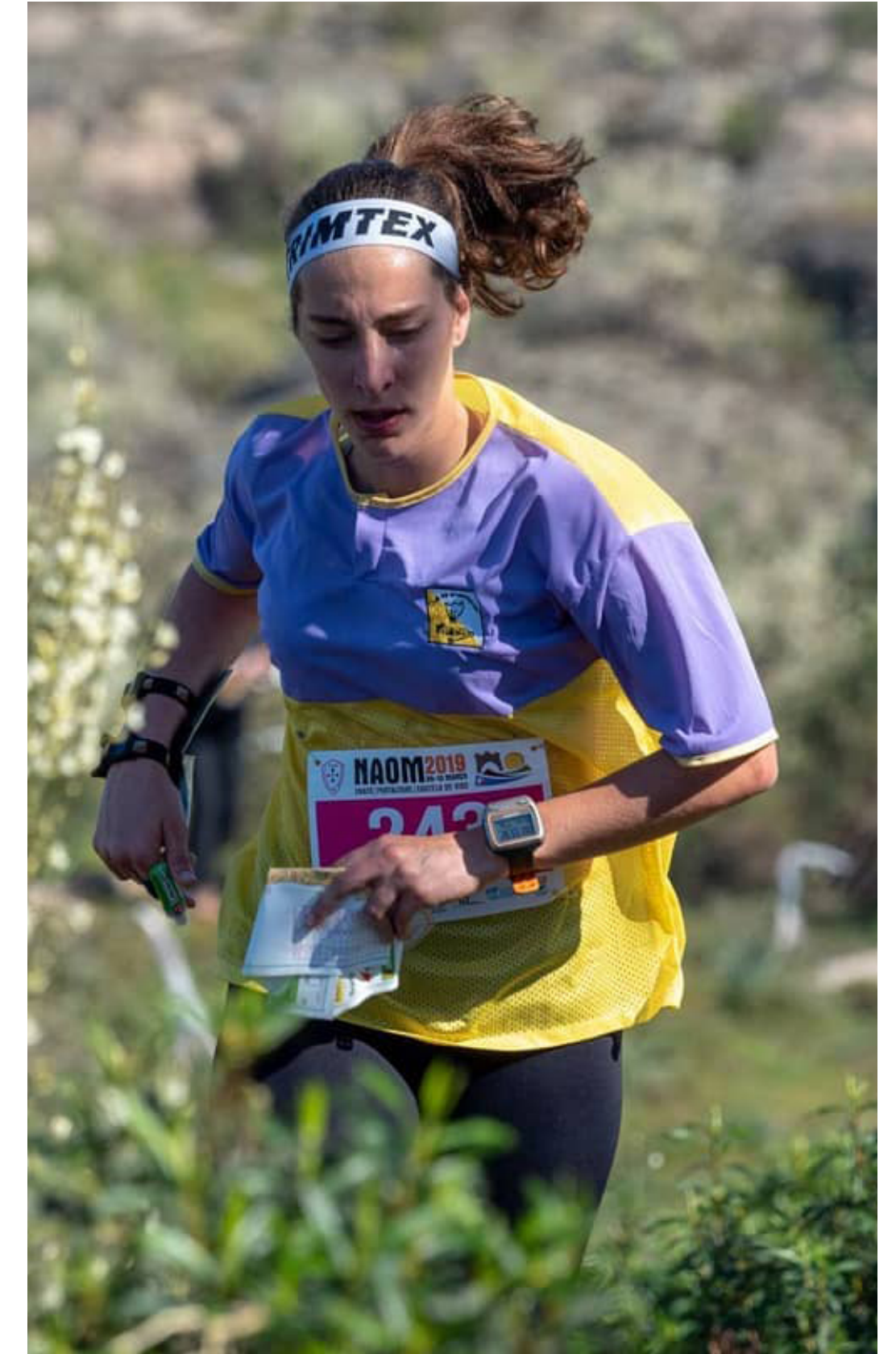
#InspiringKids

**Lovexair Foundation**, with the help of our Young Ambassadors **Arran Strong** an Alpha and **Elena Marti** asthma affected, are committed and active young athletes who pursue their lifetime goals and dreams.

**They have taken on the challenge of promoting awareness and raising funds for an R&D Project for children with poorly controlled asthma.**



**Arran Strong**  
HappyAir Ambassador



**Elena Marti**  
HappyAir Ambassador





## Main Objective

Evaluate the feasibility and preliminary effectiveness of an online/offline web-based interactive platform (HappyAir®) & HappyAirSmartCommunity in children with difficult-to-control asthma to provide care support and improve symptom control.

## Secondary Objectives

Explore the acceptability and usability of using digital devices and the platform, amongst children and young adolescents.

Assess the effectiveness in reducing exacerbations, asthma attacks and/or non-scheduled hospital visits (i.e: emergency services).

## Main Researcher

- Inés de Mir Messa, MD, PhD. *Specialist in Pediatric Pulmonology. Head of the Pediatric Asthma Unit. Hospital Universitario Vall d'hebron;*

## Collaborators

- Raquel Sebio García, PT, PhD. *Hospital Clínic (Barcelona) Research Project Management Lovexair Foundation;*
- Eva Maroto. PT, MSc. *Director of Patient Development. Lovexair Foundation;*
- Teresa Garriga-Baraut, MD, PhD. *Specialist in Allergology. Pediatric Allergy Unit. Director of the Pediatric Allergic Asthma Unit. MD. PhD. Vall d'Hebron University Hospital;*
- Gemma García del Cerro, MD. *Pulmonology and Allergology Unit. Hospital Santa Creu I Sant Pau;*
- Laura Valdesoiro, MD, PhD. *Pulmonology and Allergology Unit. Specialist in Asthma Education programmes. Hospital General ParcTauli Sabadell;*
- María Araceli Caballero, MD. *Pulmonology and Allergology Unit. Specialist in Pediatric Asthma Parc Salut del Mar Barcelona;*
- Jordi Vilaró. PT. PhD. *Full-time lecturer at FCS Blanquerna. University Ramon Llull (Barcelona). Vice-dean of Research and Post-graduate Courses. Member of the Lovexair advisory board.*
- Shane Fitch. *Lovexair Foundation CEO.*

## Previous Publications

Jimenez-Reguera B, Maroto Lopez E, Fitch S, et al.  
Development And Preliminary Evaluation Of The Effects  
Of An mHealth Web-based Platform (HappyAir™) on  
Adherence To a Maintenance Program After Pulmonary  
Rehabilitation In COPD Patients: Randomized Controlled  
Trial [published online ahead of print, 2020 June 3].

JMIR Mhealth Uhealth. 2020;10.2196/18465.  
doi:10.2196/18465

## Randomized, multi-centre, single-blinded controlled trial:

- Vall d'Hebron Hospital (Barcelona).
- Santa Creu i Sant Pau Hospital (Barcelona).
- Hospital del Mar (Barcelona).
- Parc Taulí Hospital (Sabadell).

## Sample

**60 patients** (30 patients per group) recruited from the  
pediatric allergy and respiratory services.



## Inclusion Criteria

- Children between 6 and 18 years old;
- Diagnosis of moderate to severe persistent asthma according to the GEMA guidelines;
- Difficult to control asthma according to a scoring in the Asthma Control Questionnaire (ACQ) of  $\geq 1.5$  points;
- Access to internet and a smartphone, tablet or computer;
- Ability to understand and use the web-based platform (in children <12 years with the support of their tutor or legal guardian)
- Informed consent if under 18 years (carried out by their tutor or legal guardian)

## Randomized

### Control Group (CG) will receive:

- Standard care consisting of periodic visits, to their Allergy or Pediatric Respiratory Care Services Unit, in their respective hospitals.

### Intervention Group (IG) will receive:

- Access to the HappyAir® platform for 6 months, with educational content on how to adequately use inhaled medication, how to manage their illness and how to control their asthma with the assistance of digital devices and social and medical support.
- Access to HappyAir Coach, a healthcare professional specializing in respiratory and digital health care.

## Assessment

- At baseline, prior to randomization.
- Post-intervention (6 months).
- At follow up (12 months).

## Main Outcomes

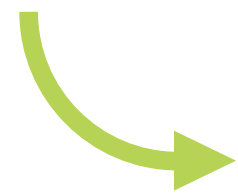
- Asthma Control Questionnaire (ACQ).
- Number of exacerbations and/or attacks, during study period.
- Feasibility of the programme (calculated from the total number of patients who consented to be recruited and who complete the intervention study period).



**Adapting HappyAir digital platform** to the integral care plan for children and young people with severe asthma.



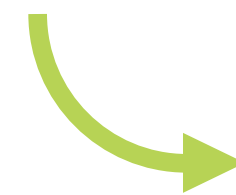
**Development of a digital recreational activity** to promote adherence and empowerment.



**IT services** for platform management during the project.




**Legal services with DPO guidance and compliance** for GDPR regulations on privacy and security and contracts with ethical committees in multi-centric framework.



**Connecting innovative digital devices or ensuring data transfer** with the HappyAir platform to manage data control and test device usability.

**Project management** by the Foundation's technical-educational-clinical team in collaboration with the specialist medical team connecting via the multi-centre network.



**Development of educational materials** for poorly-controlled asthma in this age-group in online/offlines resources.



**HappyAir Coach Training** to guide patients in their care plan and act as agents when needed with healthcare professionals.



**Monitoring and accompaniment of children** in their daily lives, support for family members and health specialists involved.



**Organization of face-to-face workshops** for families and children in places near hospitals.



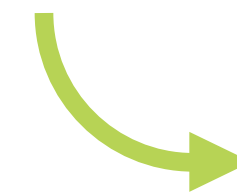
**Development of the R&D project & Data Management Construct** to publish as advance and when the study, is completed.



**Biostatistical analysis** of the results.



**Publication and presentation of the results, reports and materials** in online digital, specific events, conferences or journals, related to respiratory and digital health.



€ 48.000 \*



## Lovexair.com \*

**170K** views  
**812 page views/day**  
**4000+ users** on Newsletter/mailings

### Social Media


 **1231K** Reach  
**2117** Followers

 **47794** Reach  
**397** Followers

 **2.8K** Reach  
**88** Subscribers

 **153,7K** Reach  
**2404** Followers

 **153,7K** Reach  
**210** Followers

 COVID-19 Support  
Group: **120 users**  
(Since Jun 2010)



## Happyair.org \*

**65K** views  
**309 page views/day**  
**4000+ users** on Newsletter/mailings  
In progress: **Community software implementation**

### Social Media

 **1.6K** Reach  
**14** Followers  
(created Apr 2020)

 **1.4K** Reach  
**110** Followers

\* Audience in 2020 (01 Jan to 27 Jul) - Data obtained with Metricool;



## Alliances and regular collaborations

### Dissemination through:

- **Retail Eroski Consumer:** Twitter 56K, Facebook 221K, LinkedIn 24K.
- **PMFarma magazine pharmacy:** 400K monthly visits, 3.5K printed magazines.
- **ELF (European Lung Foundation) / ERS (European Respiratory Society)** communications: newsletters and web reports.
- LATAM: Annual events networking on jointly promoted activities including **Virtual Summit December 2020**.
- **GAAPP (Global Asthma Allergy Patient Power):** Collaboration on key events global communications support.
- **Digital Health Networks & events:** HIMSS, ECH Alliance, ASD, EIP on AHA, IFIC.
- **Digital Health Europe2020:** HappyAir recognised as Good practice.
- **Patient Advisory board membership** of Global Committees with Industry partners on digital health strategies.
- **Improvid consortia** established June 2020 with 9 leading institutions in 4 countries.

Opportunity	Bronze	Silver	Gold
Logo on all online and offline materials that are published related to the project #HappyAirInspiringKids			
Receive a report and audio-visual material of the study, events and workshops related, as well as statistical data about the projects impact for partners.			
First-hand information and recognition of the sponsorship contribution in all digital channels of Lovexair and HappyAir (2 websites), as well as in our social networks.			
Online conference to determine the best way to support your participation.			
Networking Opportunities in related events or activities.			
Direct mention in any media (radio, television, print and online media) in which we participate as part of the project.			
	€ 5.000	€ 10.000	€ 20.000



#InspiringKids

# Thank you!

Information about the clinical project

Raquel Sebío: [rsebio@lovexair.com](mailto:rsebio@lovexair.com)

Media & Sponsorship

Victor Gascón: [victorgascon@lovexair.com](mailto:victorgascon@lovexair.com)

