



**PlusMe: Transitional Wearable Companions  
for the therapy with children with  
Autism Spectrum Disorders**  
*a European funded project*

**Deliverable 2.3**  
***Diffusion of PlusMe to other users***

Work Package 2 *Test*  
due at month 21 (31<sup>th</sup> May 2022).

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This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 945887.

EU contribution € 99,375.  
Project duration 18 months (September 2020, February 2022),  
Project coordinator National Research Council of Italy,  
Institute of Cognitive Sciences and Technologies, ISTC-CNR.

# 1. Overview of the deliverable

This deliverable provides details about the centres which are currently using / will use the *PlusMe* device on children with Autism Spectrum Disorders (ASD) or with Typical Development (TD). The document provides only the description of the centres for which a formal agreement was signed at the date of June 2022 .

## 2. List of centres

### 2.1. University of Rome *La Sapienza*

The *PlusMe* is currently used in pilot experiments involving ASD children at the Department of Human Neuroscience<sup>1</sup>, Section of Child and Adolescent Neuropsychiatry, University of Rome *La Sapienza*. This clinical department, which is a reference centre for the diagnosis and treatment of neurodevelopmental disorders, was involved in the research activity from the very beginning of the project. The outcomes of such clinical trials are described in the deliverables 2.1 “*Experimental phase, stage one*”<sup>2</sup> and 2.2 “*Experimental phase, stage two*”<sup>3</sup>.

The centre, thanks to the collaboration within *PlusMe* project, became also a formal partner<sup>4</sup> of the related European funded research project “*IM-TWIN: from Intrinsic Motivations to Transitional Wearable INtelligent companions for autism spectrum disorder*”, within which the researchers will continue to use the *PlusMe* interactive toy as a support tool for therapy.

### 2.2. Centre for Research and Interdisciplinarity

The *PlusMe* is also used in pilot experiments involving TD children (see fig. 1) at the *Centre for Research and Interdisciplinarity, CRI*<sup>5</sup>. This is a French research centre, active in the field of developmental psychology; CRI is affiliated to the BabyLab<sup>6</sup>, a laboratory at the *Integrative Neurosciences and Cognition Centre, INCC, University Paris Cité* (previously University *Paris Descartes* UPD).

CRI<sup>7</sup> carries out its activity (the use of the toy with TD children) within the related European funded project “*IM-TWIN: from Intrinsic Motivations to Transitional Wearable INtelligent companions for autism spectrum disorder*”.

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<sup>1</sup> <https://web.uniroma1.it/neuroscienze/home>

<sup>2</sup> [www.plusme-h2020.eu/wp-content/uploads/2021/07/D2.1\\_experimental\\_phase\\_stage\\_one-2.pdf](http://www.plusme-h2020.eu/wp-content/uploads/2021/07/D2.1_experimental_phase_stage_one-2.pdf)

<sup>3</sup> [www.plusme-h2020.eu/wp-content/uploads/2022/05/D2.2\\_experimental\\_phase\\_stage\\_2.pdf](http://www.plusme-h2020.eu/wp-content/uploads/2022/05/D2.2_experimental_phase_stage_2.pdf)

<sup>4</sup> <https://im-twin.eu/partners/>

<sup>5</sup> <https://learningplanetinstitute.org/en/about>

<sup>6</sup> <https://baby.biomedicale.parisdescartes.fr/en>

<sup>7</sup> <https://im-twin.eu/partners/>



**Figure 1.** Selected pics showing the experimental activity involving children with typical development, carried out in *Centre for Research and Interdisciplinarity*, a French research institute, active in the field of Developmental Psychology.

## 2.3. Rehabilitation centre *NeapoliSanit*

*NeapoliSanit s.r.l.*<sup>8</sup> is a rehabilitation centre, specialised in the treatment of physical-psychical and motor deficits; within the centre, the department “*DAPI - Divisione Autismo*”<sup>9</sup> deals with treating ASD. ISTC-CNR reached the researchers from *NeapoliSanit* through the workshop<sup>10</sup> held on 28 March 2022, focused on *PlusMe* interactive toy. Such initial contact resulted then in a

<sup>8</sup> <https://neapolisanit.com/mission/>

<sup>9</sup> <https://neapolisanit.com/divisione-di-autismo-e-psicosi-infantili/>

<sup>10</sup>

[www.plusme-h2020.eu/wp-content/uploads/2022/04/D3.4\\_Dissemination\\_research\\_activities\\_stage\\_two.pdf](http://www.plusme-h2020.eu/wp-content/uploads/2022/04/D3.4_Dissemination_research_activities_stage_two.pdf)

formal scientific collaboration<sup>11</sup> between ISTC-CNR and *NeapoliSanit*. The research activities focused on *PlusMe* are scheduled to begin from September/October 2022; the feedback from the therapists will be very helpful to better evaluate the use of the toy as a potential support tool, also with neurodevelopmental disorders other than ASD.

## 5. Conclusions

At present (June 2022), the ISTC-CNR is arranging further agreements with some of the potential users who were reached through the dissemination activities. It is important to note that the involvement of other interested users (mainly neurodevelopmental therapists) is made possible thanks to the small scale *PlusMe* production<sup>12</sup>, planned in the IM-TWIN related project.

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<sup>11</sup> Formal agreement between the two institutes signed in June 2022.

<sup>12</sup> See IM-TWIN deliverables 3.5 and 3.6 <https://im-twin.eu/deliverables/>, which give details about the *PlusMe* small scale production.