dnosis

WILD CARD | eit Health

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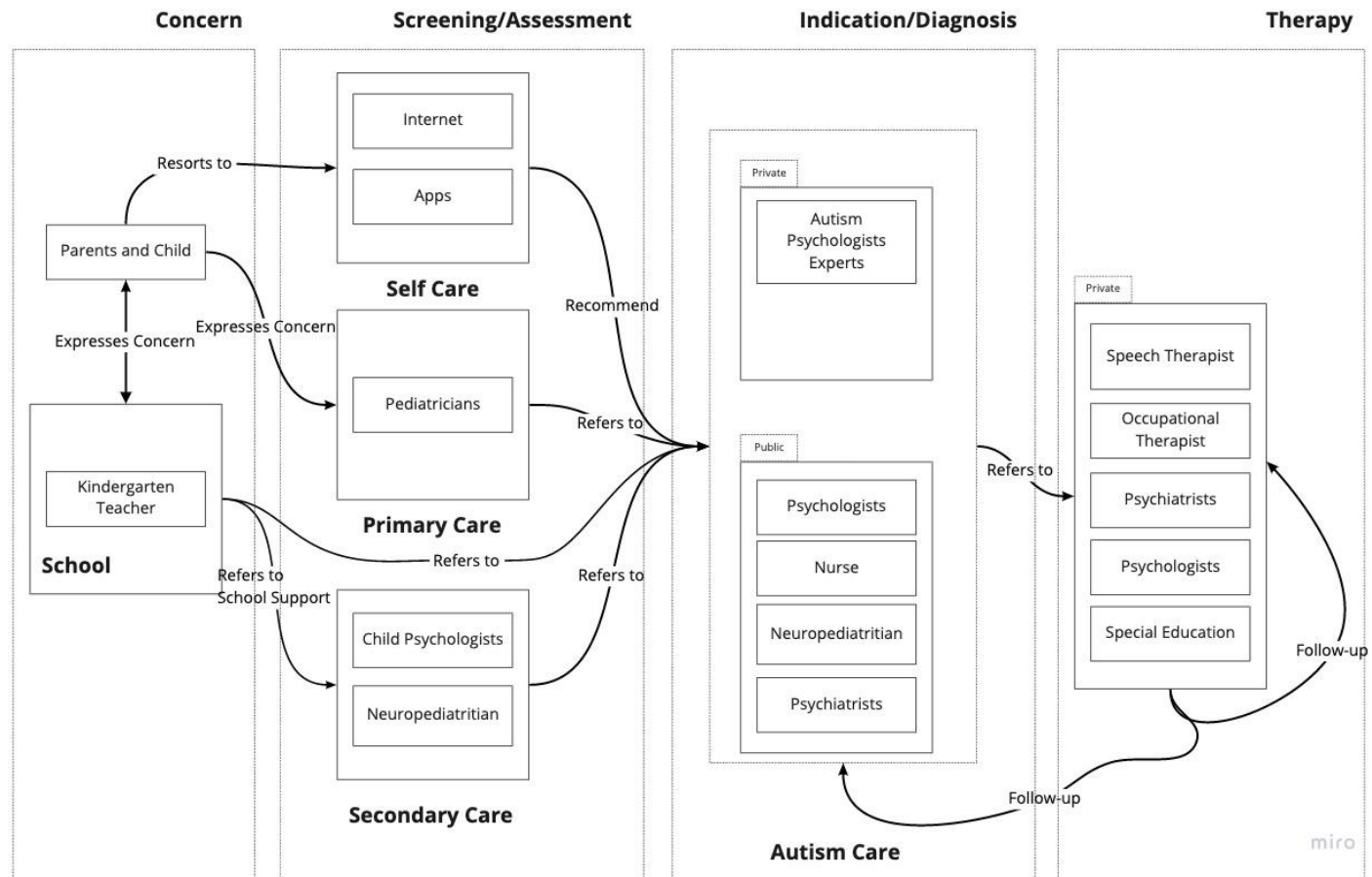## Andreu Oliver
Tech Lead

Cognitive Psychologist PhD
Eye Tracker Expert
Majorcan and Bikepacker

Objective Diagnosis of Autism Spectrum Disorder
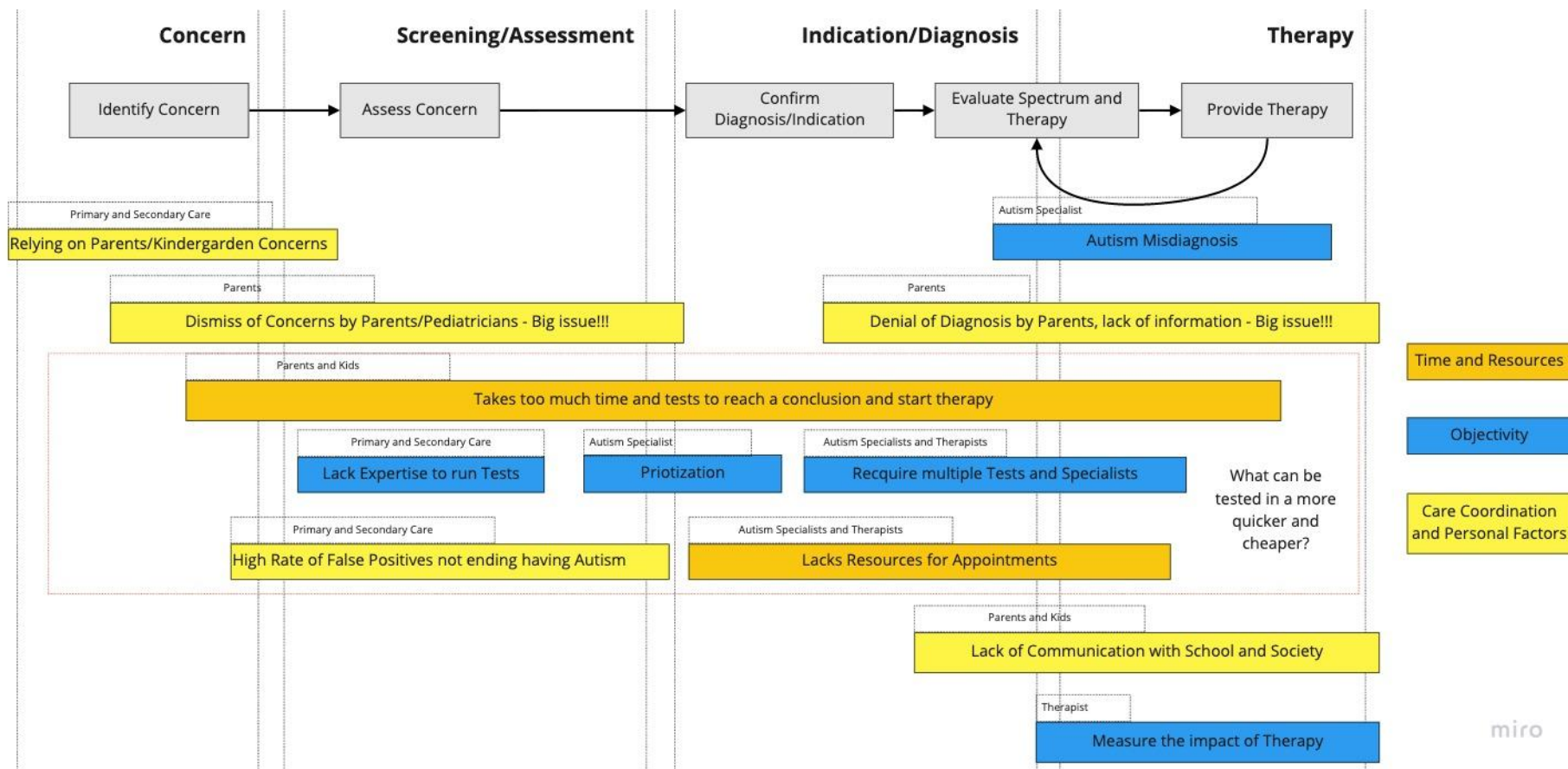
Interview Totals

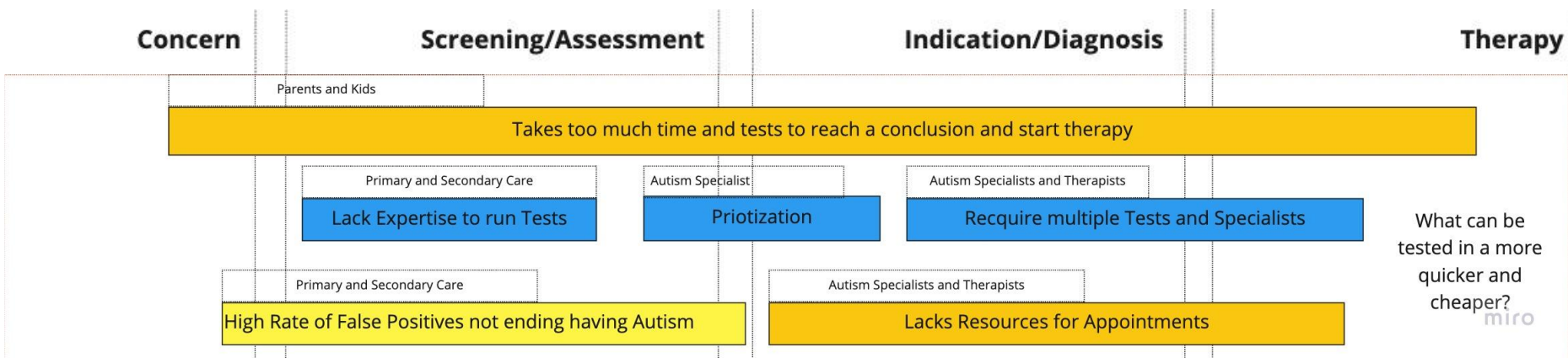| Week	In-Person	Video	Phone	Total
13-May	4	0	7	11
21-May	5	0	7	12
27-May	4	0	6	10
3-June	2	0	4	6
10-June	2	0	6	8
			Total	47

Clinical Pathway

Needs Insights

Beachhead Problem

Concern	Screening/Assessment	Indication/Diagnosis	Therapy

Parents and Kids

Takes too much time and tests to reach a conclusion and start therapy

Primary and Secondary Care — **Lack Expertise to run Tests**

Autism Specialist — **Priotization**

Autism Specialists and Therapists — **Recquire multiple Tests and Specialists**

Primary and Secondary Care — **High Rate of False Positives not ending having Autism**

Autism Specialists and Therapists — **Lacks Resources for Appointments**

What can be tested in a more quicker and cheaper?

miro

Reduce the time to diagnosis on the diagnostic pathway

Needs and Job to be Done

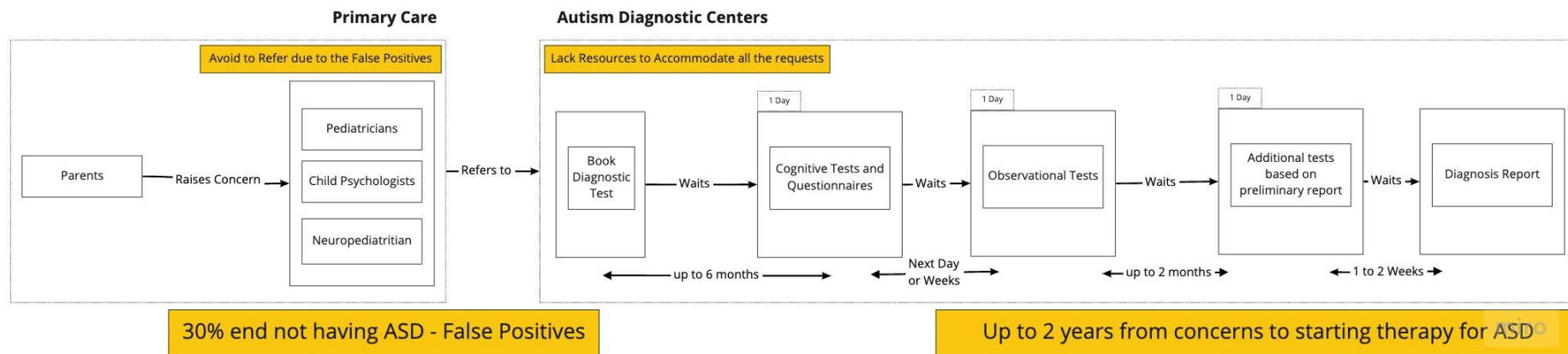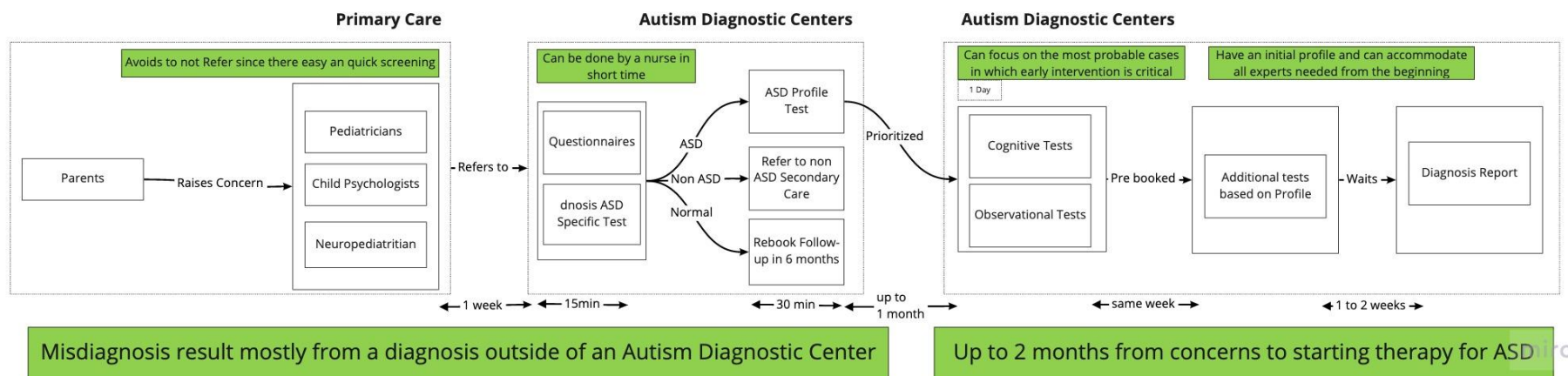| Concern | Screening/Assessment | Indication/Diagnosis | Therapy |
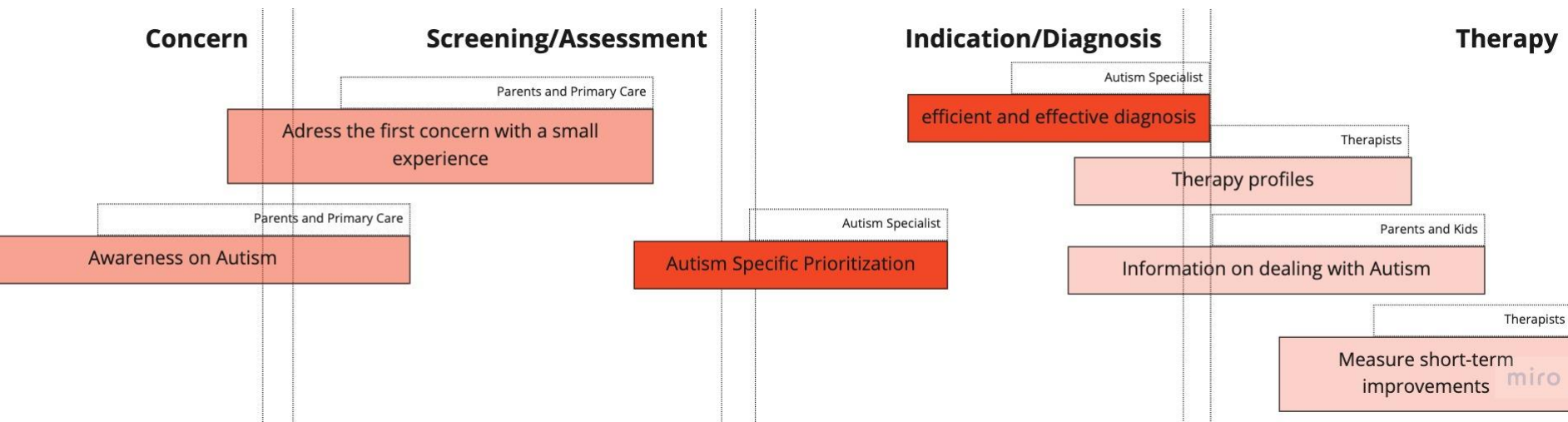
Target: ASD Diagnosis Specialists

- Triage the children with ASD concerns to better allocate care and resources avoiding to miss on false negatives (specificity)

- Reduce the resources and time required for a full diagnosis

Value Proposition

without dnosis

Primary Care

Avoid to Refer due to the False Positives

Parents — Raises Concern → [Pediatricians / Child Psychologists / Neuropediatritian] — Refers to →

Autism Diagnostic Centers

Lack Resources to Accommodate all the requests

Book Diagnostic Test — Waits → Cognitive Tests and Questionnaires (1 Day) — Waits → Observational Tests (1 Day) — Waits → Additional tests based on preliminary report (1 Day) — Waits → Diagnosis Report

← up to 6 months → ← Next Day or Weeks → ← up to 2 months → ← 1 to 2 Weeks →

30% end not having ASD - False Positives

Up to 2 years from concerns to starting therapy for ASD

with dnosis

Primary Care

Avoids to not Refer since there easy an quick screening

Parents — Raises Concern → [Pediatricians / Child Psychologists / Neuropediatritian] — Refers to →

Autism Diagnostic Centers

Can be done by a nurse in short time

Questionnaires / dnosis ASD Specific Test — ASD → ASD Profile Test → Prioritized → ; Non ASD → Refer to non ASD Secondary Care ; Normal → Rebook Follow-up in 6 months

Autism Diagnostic Centers

Can focus on the most probable cases in which early intervention is critical

Have an initial profile and can accommodate all experts needed from the beginning

Cognitive Tests / Observational Tests (1 Day) — Pre booked → Additional tests based on Profile — Waits → Diagnosis Report

← 1 week → ← 15min → ← 30 min → up to 1 month ← same week → ← 1 to 2 weeks →

Misdiagnosis result mostly from a diagnosis outside of an Autism Diagnostic Center

Up to 2 months from concerns to starting therapy for ASD

Solution

dnosis ASD Biomarker

Response

Stimuli

**AI Classifier
from multiparametric features
based on functional Brain Model
connections network**

Launch - ASD/Non-ASD/Typical Development

Eye Tracker

Research - 93% Accuracy - 300 kids Trial

2nd Phase - ASD Profile
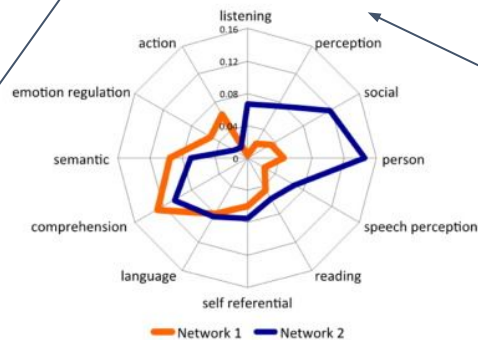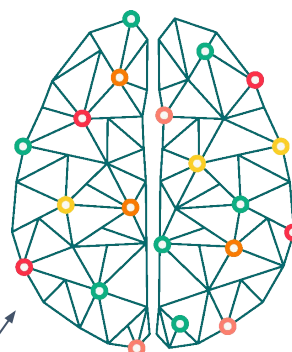
Mobile Game Test
Market - 94% Accuracy - 700 kids Trial

Video

Sound

Social Immersion

Physical Interaction

Cognitive Challenges

Facial Expression

Research

Biofeedback (stress)

Research

**Each assessment gives a perspective view of brain networks which
enriches with more data and can be tracked and combined along the
time**

We go beyond existing pattern recognition from individual measurements

Regulatory Status

- No Predicate for ASD in US
- Eye tracking medical devices only provide measures
- No diagnostic support tool for ASD in US and EU

- US Class II Medical Device - Diagnostic support tool (same in EU)
- De novo Pathway - First in class, low to moderate risk

- Requires comparison with gold standard in clinical study (diagnostic reports from cognitive tests and observation)
- We have already data from partners using only eye tracking (need to review the clinical practices for the study)