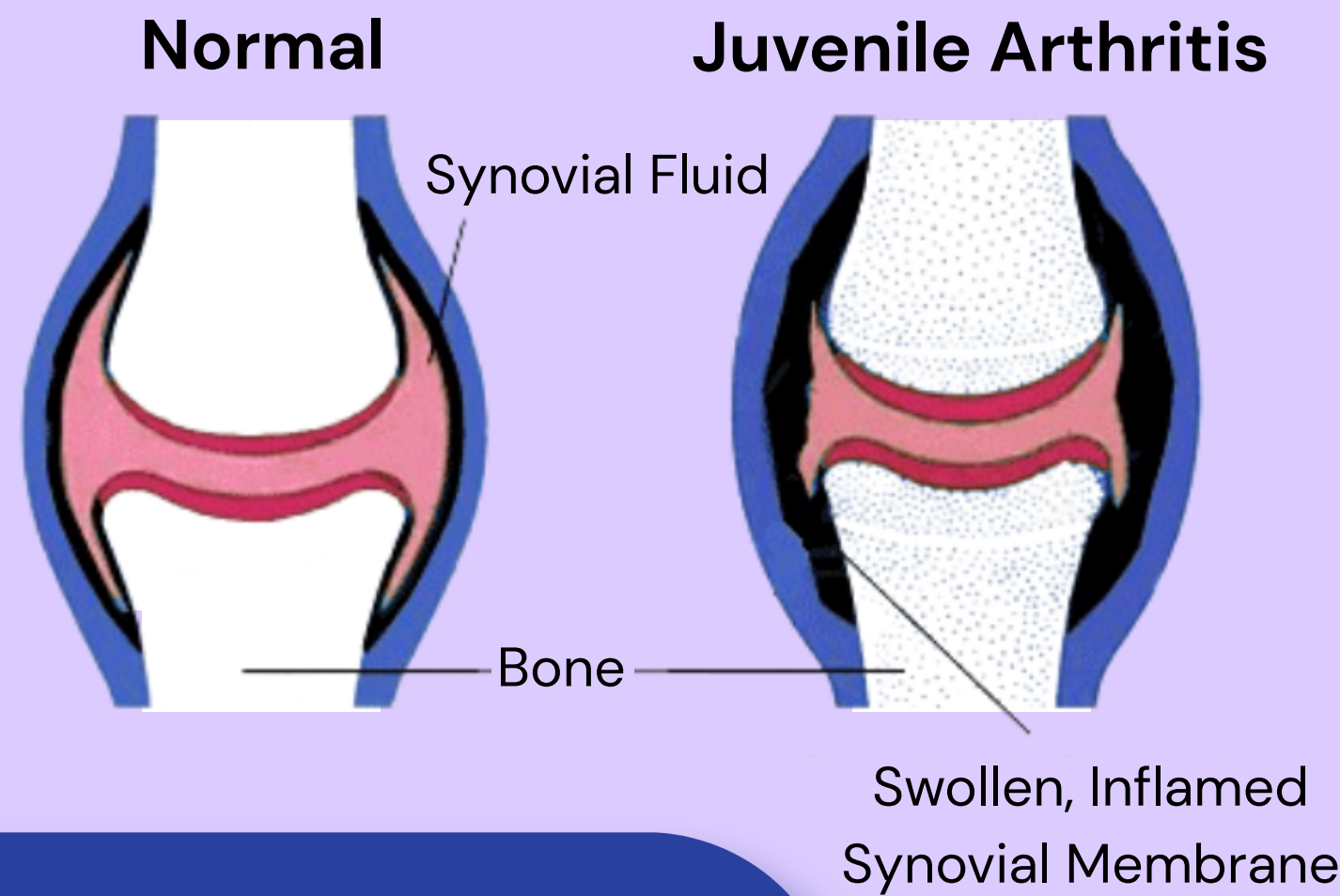




E9 Mariel Huelskamp, Charlotte Parsley, Kylie Bauer, Shreyas Shrestha, Akankshya Mohanty

THE PROBLEM

- **Juvenile Idiopathic Arthritis** is the most common form of arthritis in people under 16.
- **Impacts** roughly 3 million people worldwide.
- **JIA Stigma** is linked to worsening symptoms and quality of life.
- **A Communication Gap** forms between young patients and their doctors.



“I’m in pain, and I’m not faking it.”

CURRENT SOLUTIONS

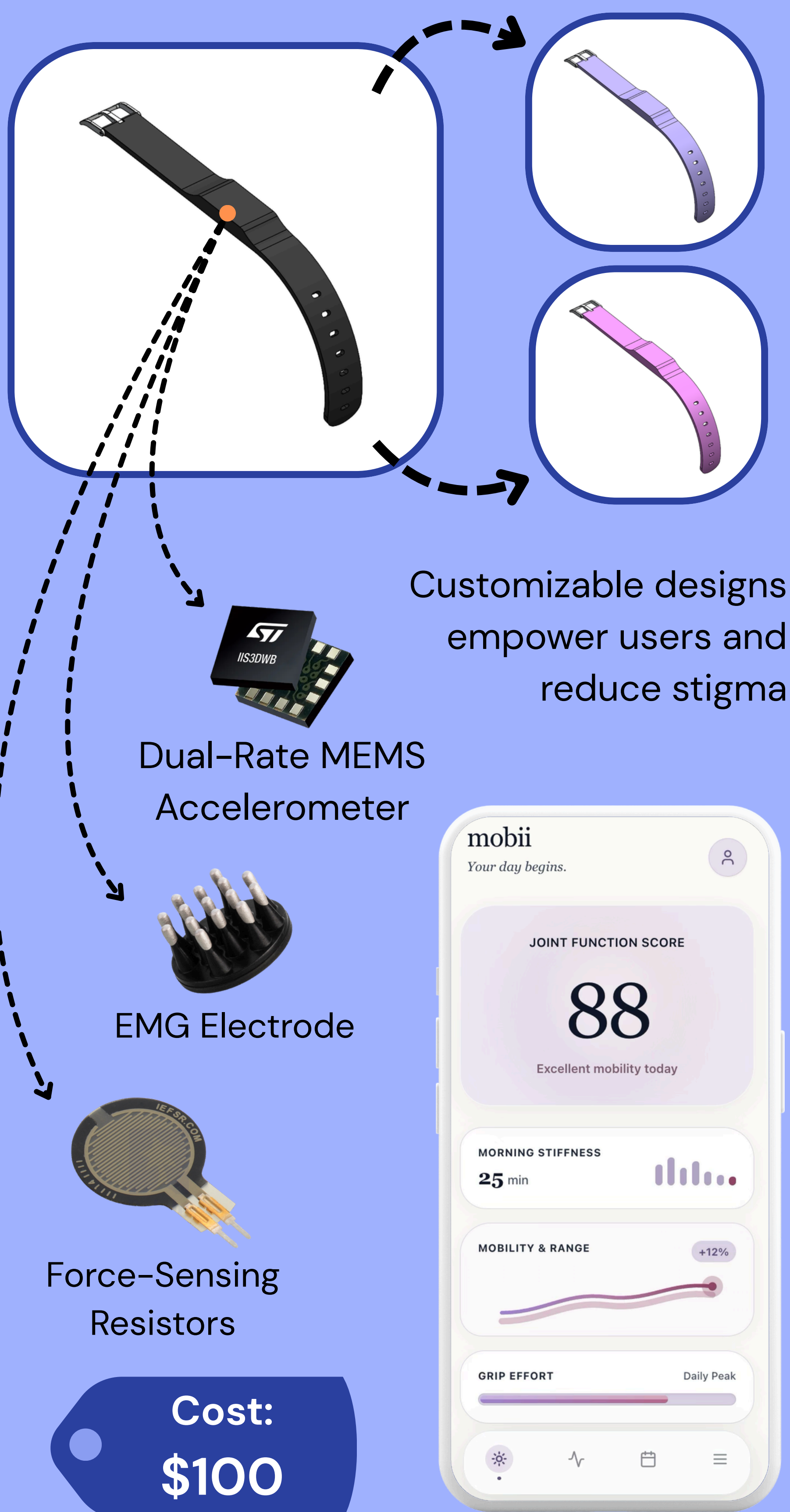
- Infrequent, expensive doctor visits
- Subjective self-reporting

OUR SOLUTION

Continuous JIA Symptom Tracking Wristband

- **Full-Picture Data:** Doctors see symptoms in daily life
- **Joint Function Score:** Combines measurements into simple score to show trends over time
- **Empowering Patients:** Provides objective data to improve communication and allow patients to take control of their health

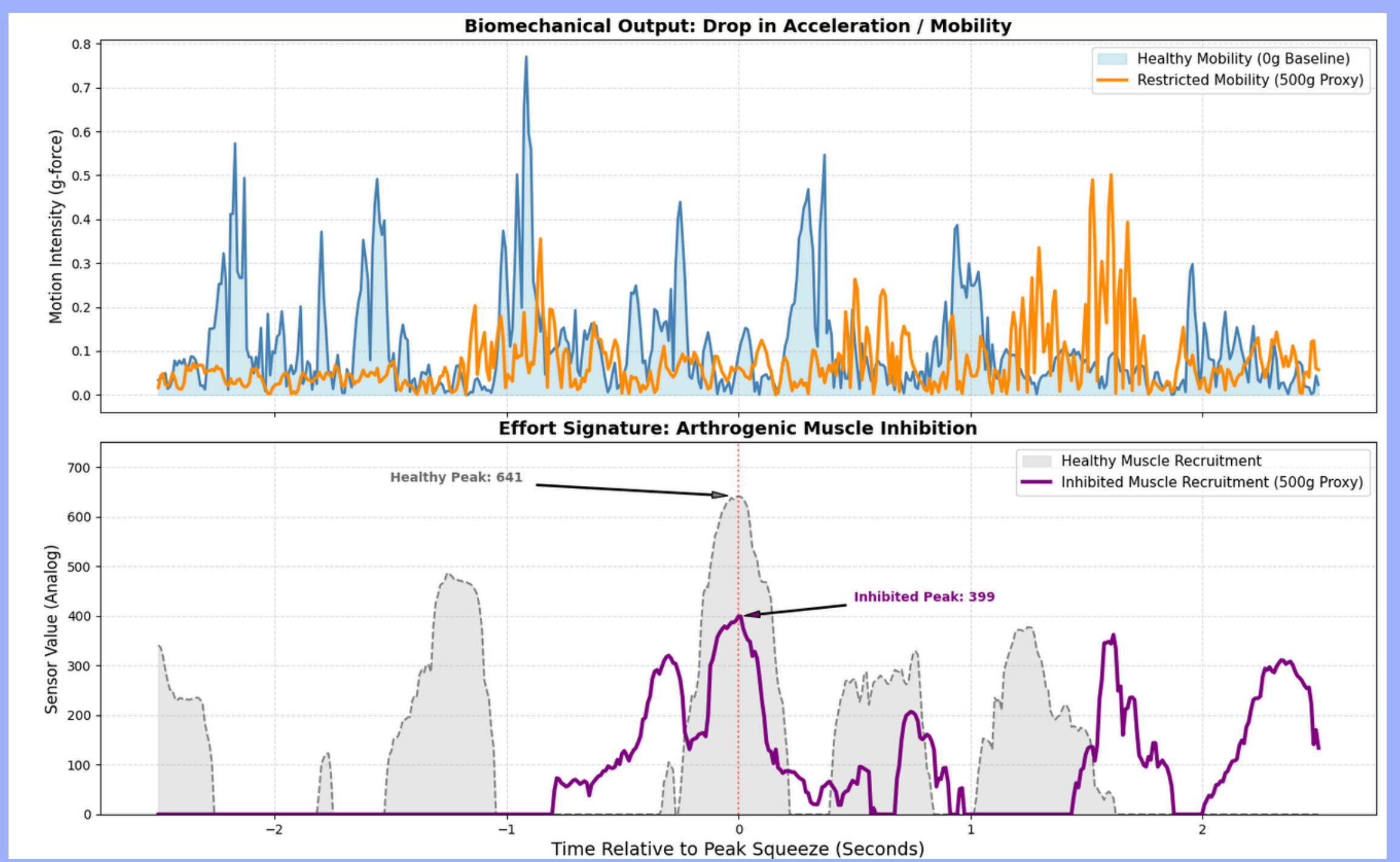
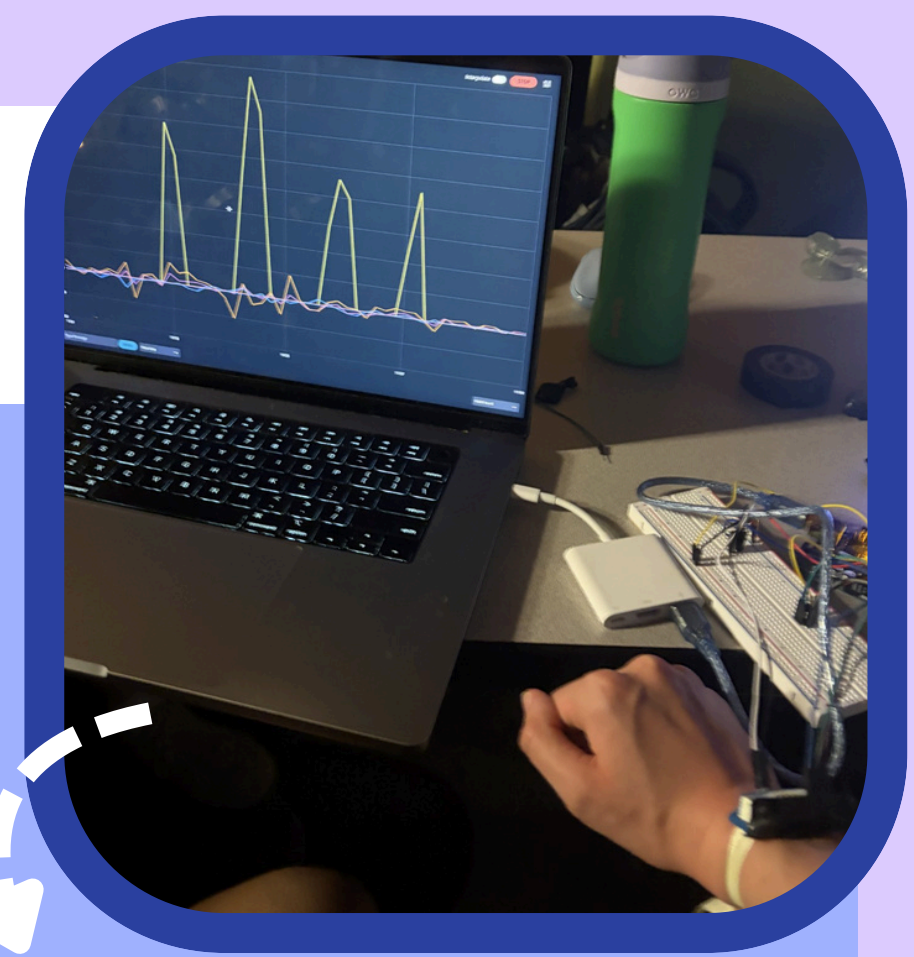
OUR DESIGN



TECHNICAL EXPERIMENT

During flare-ups, mobii measured:

- 38% drop in peak muscle usage
- 37% loss of physical mobility, with peak acceleration blunted



SCALABILITY

Phase 1:
Initial Product Rollout

Modular assembly

Online distribution

Grassroots JIA marketing

Phase 2:
Extending Our Reach

Clinical partnerships with rheumatology networks

Mass production and lowered costs

Broadening market to other forms of arthritis