



HARMAN INTERNATIONAL CONFIDENTIAL COPYRIGHT 2024

HARMAN HEALTHCARE & LIFESCIENCE

- Tuesday, 19 March 2024



- **DECENTRALIZED CLINICAL TRIALS**

SMART CLINICAL TRIALS | CONNECTED CARE | PATIENT 360

Harman ecosystem can accelerate the connected pharma journey for our customers with its Accelerators, Digital Engineering Capabilities & Partnership

TRIAL MANAGEMENT SOLUTIONS

Quick Trial Configuration, Patient Onboarding, Engagement & Retention

Oncology DCT solutions for European Pharma Major..



REMOTE PATIENT MONITORING

HARMAN RCP Remote Monitoring platform & accelerators with connected wearables, devices, collaboration, care plans & more

Maternal care solution for REACH "Happy MAMA"



DIGITAL PATIENT ENGAGEMENT

Seamless & secure patient interaction & education

HARMAN eNOVA: AI powered Voice Assistance

HARMAN Media Suite : Curated content management

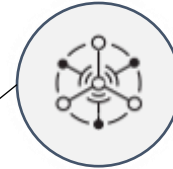
Autism VR Digital Therapy & Medical Adherence for Pharma Major



SMART CLINICAL TRIALS

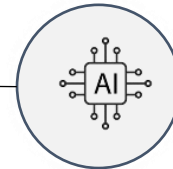
CONNECTED DEVICES

HARMAN Smart Connected Devices & IOT Framework : Edge to Insights, Device data, Condition monitoring, Track & Trace
Lab instruments connectivity & monitoring for leading Scientific Instrument Major



HARMAN DATA & ADVANCED ANALYTICS

HARMAN Life-ware.AI : Edge-to-cloud AI, customizable industry focused AI/ML models, MLOps & professional services, Analytics & Visualization



DIGITAL ENGINEERING CAPABILITY FOR SEAMLESSLY INTEGRATED SOLUTIONS

Build & sustain Software platforms, Application development, Mobility, Testing, Validation, Cloud & Infra Management



WE HAVE ACCELERATED TIME-TO-MARKET FOR CUSTOMERS IN AREAS OF CLINICAL TRIALS, PATIENT ENGAGEMENT & MONITORING, IOT & MORE...

Gain new insight In your clinical trial Journey

We Enable Quick Trial Configuration, Patient Onboarding, Engagement & Monitization from Clinical Data powered by HARMAN's Accelerators

Personas



Clinical Study Lead

- Fostering more trials
- Trial Optimization



Clinical Data Lead

- Train the Model
- Comparative Studies



Clinical Site Lead

- Site Selections
- Patient Selection



Trial Participants/ Caregivers



- Patient Monitoring
- Real time insights

Service Offerings



Trial Configuration	Kit Management	Patient Onboarding	Data Collection	Patient Engagement
<ul style="list-style-type: none"> • Mobile App, Wearables • eConsent • ePRO/eCOA • Clinics • Document Management 	<ul style="list-style-type: none"> • Device Configuration • KIT Preparation, Refurbishing, Mgmt • IOT Gateway for non-connected devices 	<ul style="list-style-type: none"> • Digital Remote Patient onboarding • Digital eConsent • Custom Training Videos 	<ul style="list-style-type: none"> • Remote ePRO • Vitals, EDIP • MAUQ/QUEST • Evidence for FDA Submission 	<ul style="list-style-type: none"> • ePRO Adherence • Vital Adherence • Notifications and Alerts • Video Teleconference
Clinical Data Management	Data Analytics Services	AI/ML Model Training	Integration Services	

Accelerators

Wearables Connectors	Edge.AI Gateway	HARMAN 5G Labs	AI based Voice assistance	NOVA	MEDIA SUITE	HARMAN RCP	Lifeware.AI Framework	DefenSight, cybersecurity framework	Redbend Over-The-Air-Update
----------------------	-----------------	----------------	---------------------------	------	-------------	------------	-----------------------	-------------------------------------	-----------------------------

Benefits

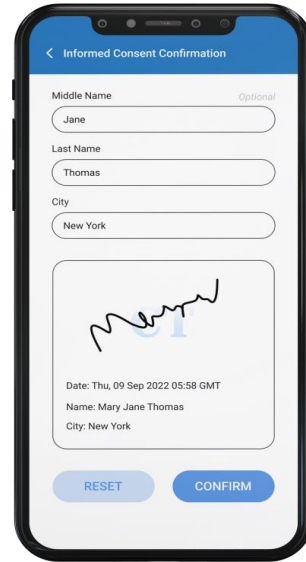
Streamlining the Trial Process	Clinical Trials Costs	Clinical Outcomes	Fasten Drug Discovery Process
--------------------------------	-----------------------	-------------------	-------------------------------

DECENTRALIZED CLINICAL TRIALS

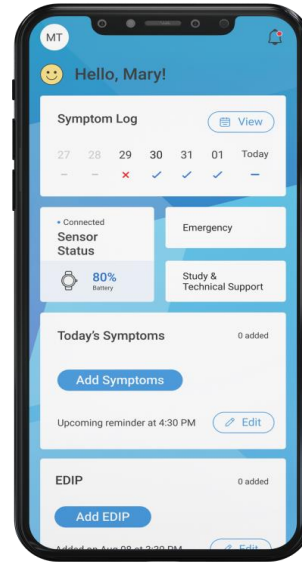
Trial Apps

Configurable

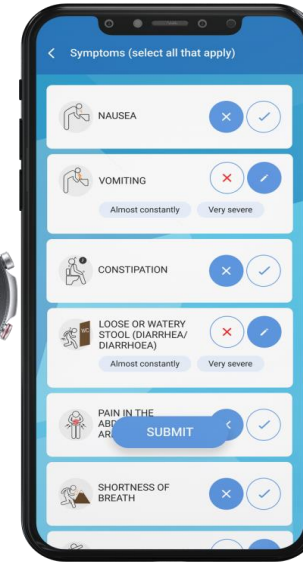
- Consent
- ePRO/eCOA
- Surveys
- Vitals
- EDIP
- Language



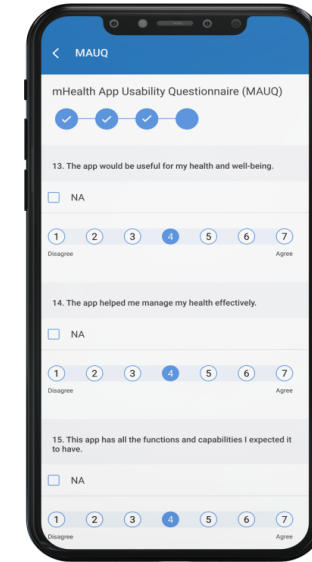
Consent Mgmt.



Patient Engagement



ePRO

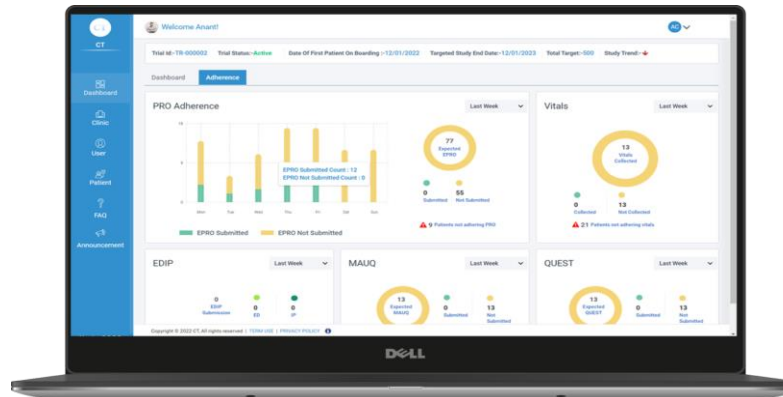


Patient Surveys

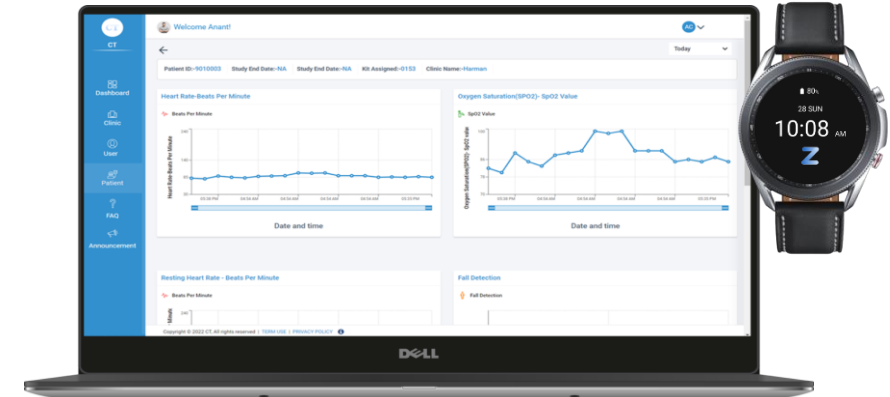
Trial Deployment

Configurable

- Consent
- Clinics
- Dashboard
- Adherence



ePRO Adherence



Vital Adherence



Decentralized Clinical Trials (DCT)

Decentralized Clinical Trials

Robust scalable platform to provide services in headless manner to run clinical trials, onboardings and patient reported outcomes data collection for detailed study of the trial conducted.



Business Context & Requirement:

- Use of a Smartphone Application and Biosensor to Intervene on and Reduce Emergency Department & Unplanned Hospital Visits.
- Phase I Clinical Trial for 30 Oncology patients
- Samsung Galaxy Watch integration for vital collection

HARMAN Solution:

Patient Application:

- Enables patients to access ePRO, enables patient access to treatment-related information and services

Biosensor:

- Captures patient biomarkers to enrich ePRO data
- Wearable watch is integrated as part of a solution to monitor the biomarkers of the patient.

Provider Dashboard and Alert System:

- Delivers real-time alerts and patient-specific communication to providers that inform/trigger interventions

Key Value Delivered:

- ✓ Better patient recruitment and retention
- ✓ Real time communication with patients
- ✓ More flexibility as compared to traditional clinical trials
- ✓ Improved data diversity