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Leveraging Digital for
Empathic Patient Experience
enhancing CRO activities

2020, December 17th

The C²RO

A unique value proposition



Clinical Expertise



Life Data Sciences

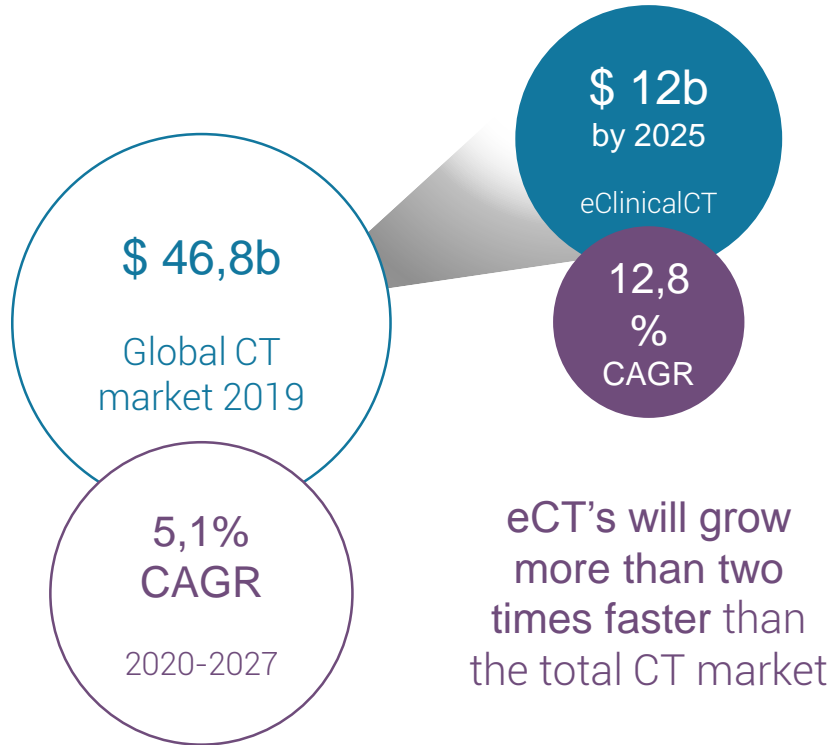


Digital Enablement

Our mission is to help **connect** industry expertise, Life Data Sciences and Digital Enablement to fully leverage both Clinical Research ecosystems and Real-World Evidence/RWE in healthcare, **making Clinical Research activities more reliable, innovative, and agile**

But let's focus on the CRO part of the equation

Industry Trends – digital trials will grow faster than global CT market



The paradigm shift between traditional trials versus remote / digital trials is exactly the journey Keyrus Life Science embarked on even prior to the COVID-19 pandemic
We strongly believe this is a game changer

(*) number of trials per phase (GlobalData, 2019), and average total cost per trial (<https://doi.org/10.1177/1740774515625964> and <https://www.appliedclinicaltrials.com/view/non-adherence-direct-influence-clinical-trial-duration-and-cost>)



R&D challenges faced by the industry

compound funnel main barrier : from the thousands in early discovery to the few ones on trials and marketed

Typical patients funnel challenges are prescreening , consent , drop out

multiplicative effect !

overall drop-out rate over the full CT cycle is **30%**

574 clinical trials in Belgium in 2019

impact of delays amounts **600k** up to **8m** per day

80% of clinical trials fail to finish on time

20% of those are delayed for **6+ months**

many trials are **put on hold**

due to Covid-19, **85%** of all clinical trials will experience delays

additional difficulty to **recruit, resistance** to visit hospitals

Reasons for dropping out : rational vs emotional reasons

inconvenient location



schedule conflict



financial constraints



lack of appreciation



forgetting visits



fear and anxiety



misunderstood expectations



side effects



refusal to comply













condition not improving




Reasons for dropping out

emotional topics

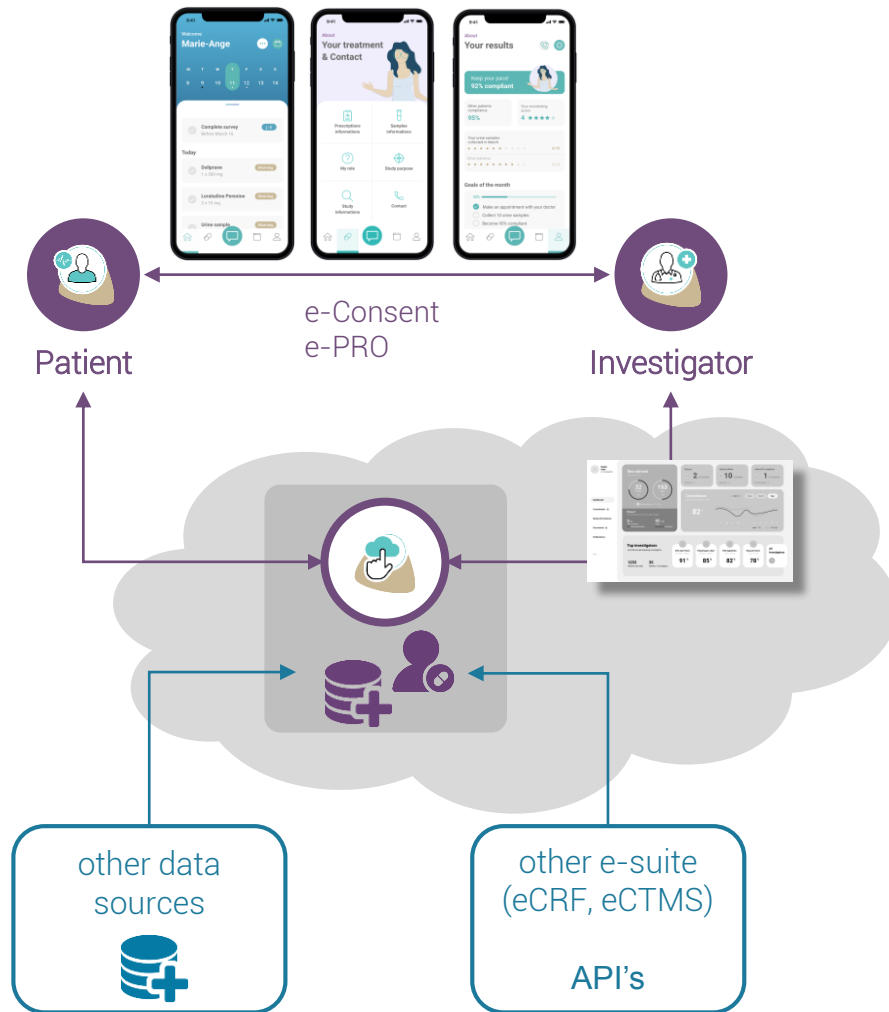
inconvenient location 	schedule conflict 	financial constraints 	lack of appreciation 	forgetting visits 
fear and anxiety 	misunderstood expectations 	side effects 	refusal to comply 	condition not improving 

Reasons for dropping out

medical topics

inconvenient location 	schedule conflict 	financial constraints 	lack of appreciation 	forgetting visits 
fear and anxiety 	misunderstood expectations 	side effects 	refusal to comply 	condition not improving 

The Digital Ecosystem – the absolute journey to embark on



beyond the patients

- keep in mind that the clinical trial deals with a **full ecosystem** of actors, not only the patient
- by creating the **digital backbone** to connect the patient and the investigator ecosystem, **data is faster and more accurate** (adverse effects, treatment adherence), making the trial **more agile**
- by allowing **telemonitoring**, the needs for on-site monitoring visits are decreased

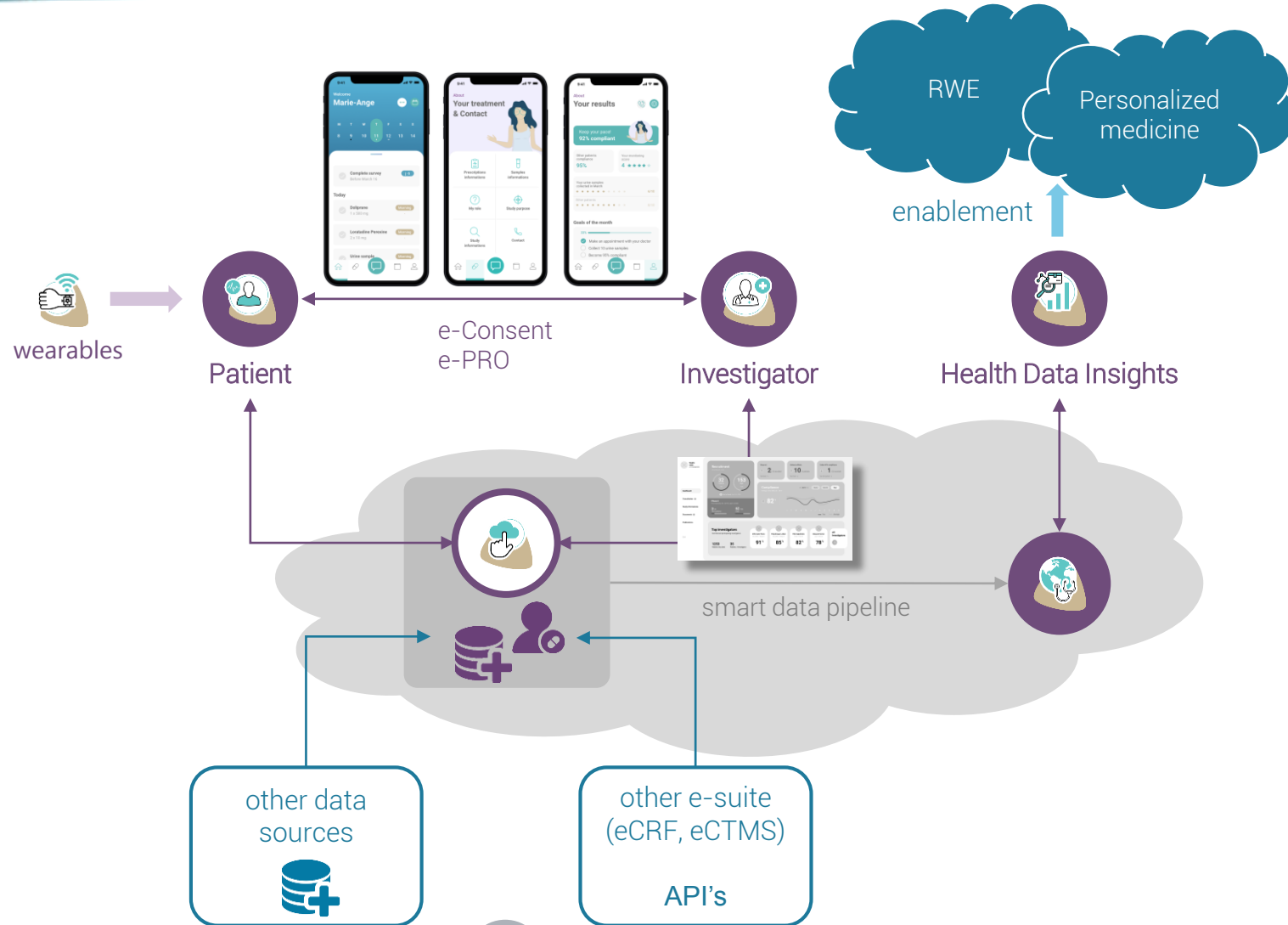
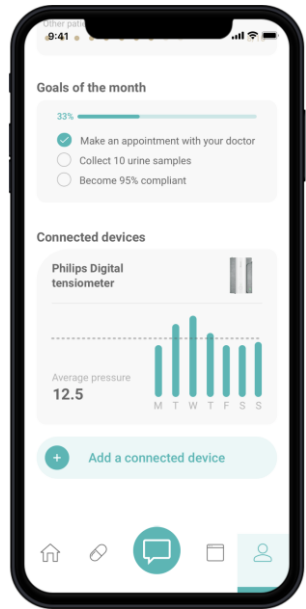
But also driven by the patient

- **create a new patient experience through digital apps to**
 - share information about the study
 - use e-consent as the new standard
 - allow patient to be an actor rather than a study topic and have interactions at any time
 - care about patient feedback (emotions/questions)

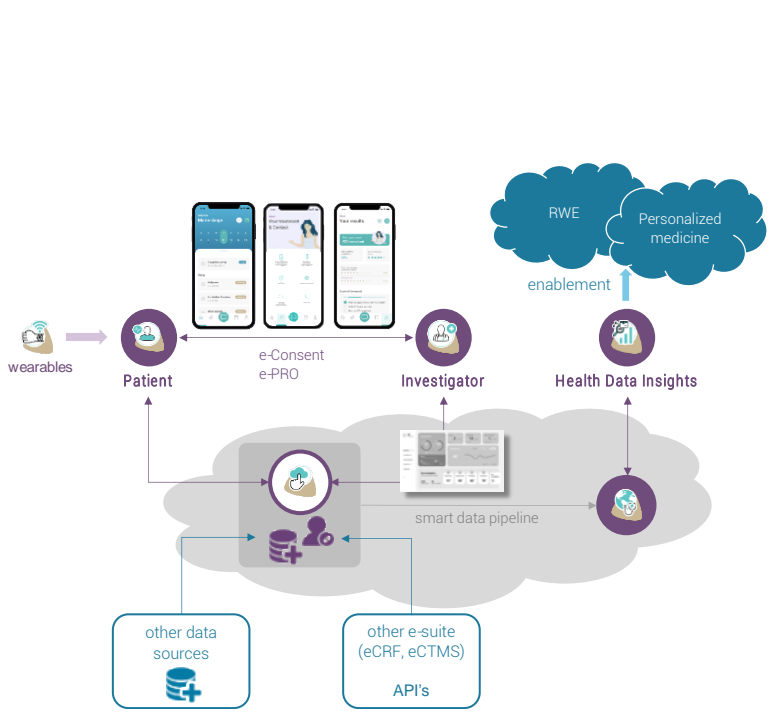
What's next ?

Bridging clinical trials and healthcare

connected devices allow ever richer and faster data to be collected, opening the way to more personalized medicine



New paradigm



patient → patient actor → patient sub-investigator

strengths	weaknesses
<ul style="list-style-type: none"> • direct sourcing of data (patients) • richer, denser data • unlocking new analytical approaches (ML/AI) 	<ul style="list-style-type: none"> • challenges for data standardization, analysis • regulatory challenges for devices and systems (ex. privacy)
<ul style="list-style-type: none"> • empowerment of patients to participate as data gatherers • augmented RWE • Personalised medicine 	<ul style="list-style-type: none"> • underestimating regulatory issues • delay due to the failure of regulators to organize the <i>connected world</i>

data quality



Appendix



Thank you !

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