
Patient-Centric Studies & Digital Engagement

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Agenda

- Global Trends
- Patient Motivators and Barriers
- Study models
- Case Study: Digital Engagement



Relevant Global Trends – And What Does it Mean

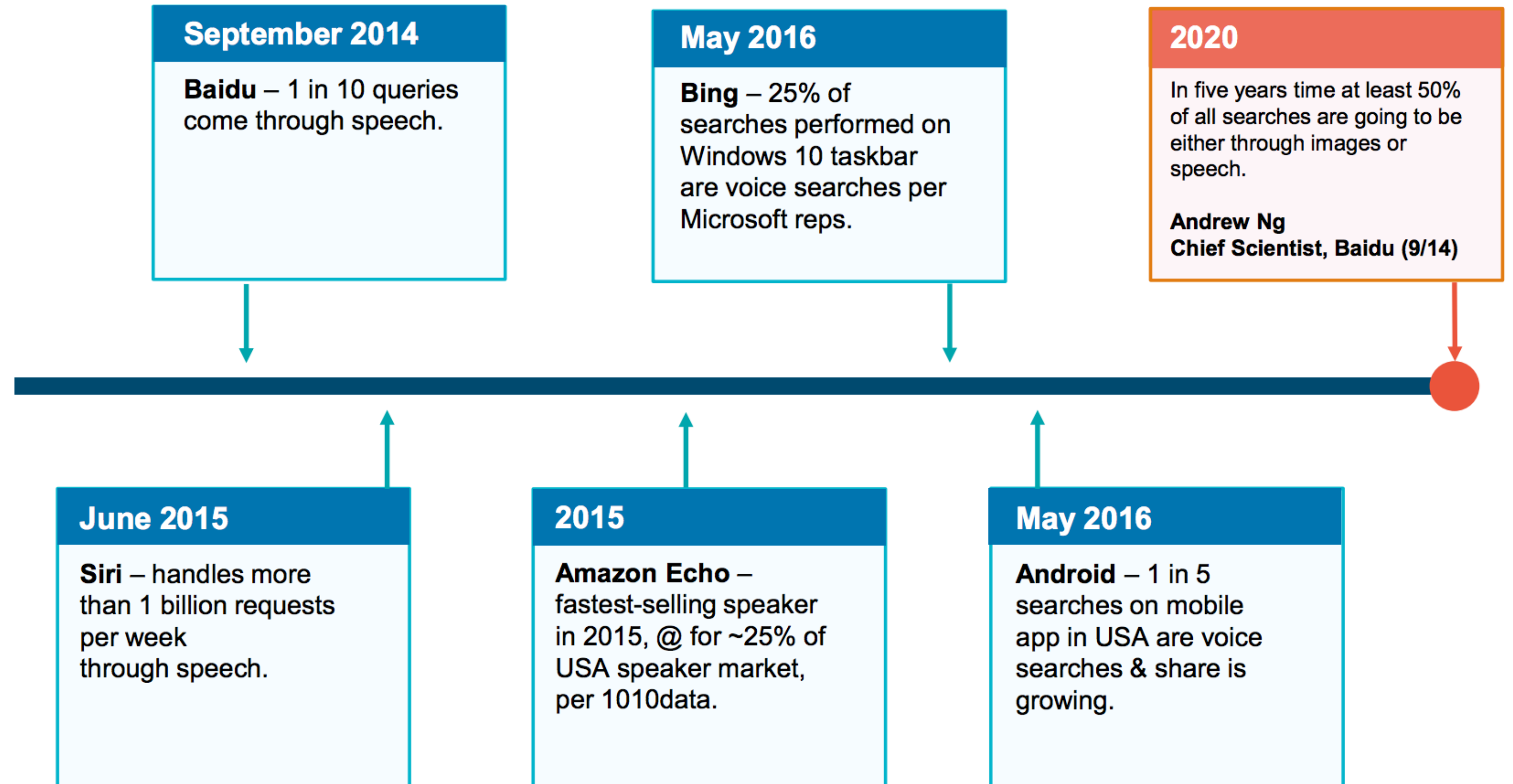
Consider
your
audience

Popularity of Business Contact Channels, by Age

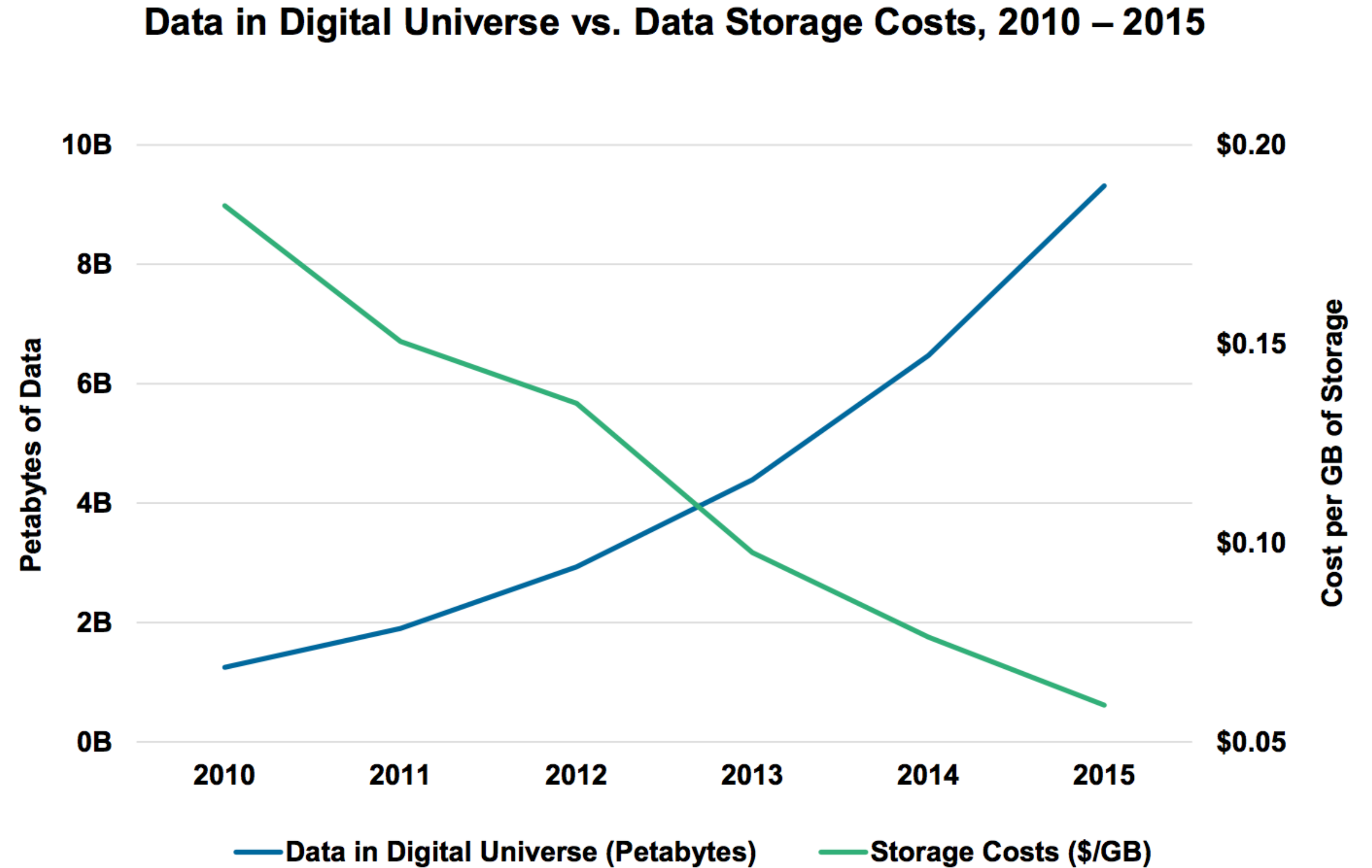
*Which channels are most popular with your age-profiled customers?
(% of contact centers)*

	% of Centers Reporting Most Popular Contact Channels by Generation				
	Internet / Web Chat	Social Media	Electronic Messaging (e.g. email, SMS)	Smartphone Application	Telephone
Generation Y (born 1981-1999)	24% (1 st choice)	24% (1 st choice)	21% (3 rd choice)	19% (4 th choice)	12% (5 th choice)
Generation X (born 1961-1980)	21% (3 rd choice)	12% (4 th choice)	28% (2 nd choice)	11% (5 th choice)	29% (1 st choice)
Baby Boomers (born 1945-1960)	7% (3 rd choice)	2% (5 th choice)	24% (2 nd choice)	3% (4 th choice)	64% (1 st choice)
Silent Generation (born before 1944)	2% (3 rd choice)	1% (4 th choice)	6% (2 nd choice)	1% (5 th choice)	90% (1 st choice)

Voice – Fast Adoption

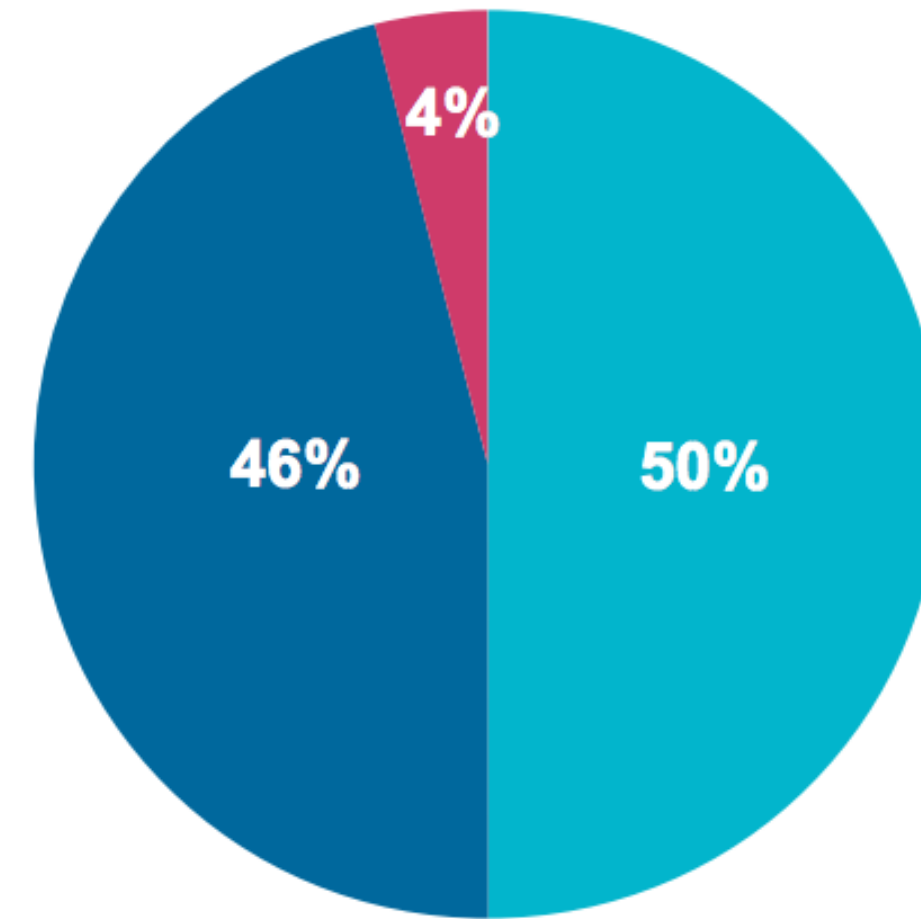


Data!



Privacy Awareness

How Concerned are You About Data Privacy & How Companies Use Customer Data?



- Very Concerned
- Somewhat Concerned
- Not Concerned

45%

Are more worried about their Online privacy than one year ago

74%

Have limited their online activity in the last year due to privacy concerns

Data as UX

Data is moving from something you use outside the workflow to becoming a part of the business app itself.

It's how the new knowledge worker is actually performing their job.

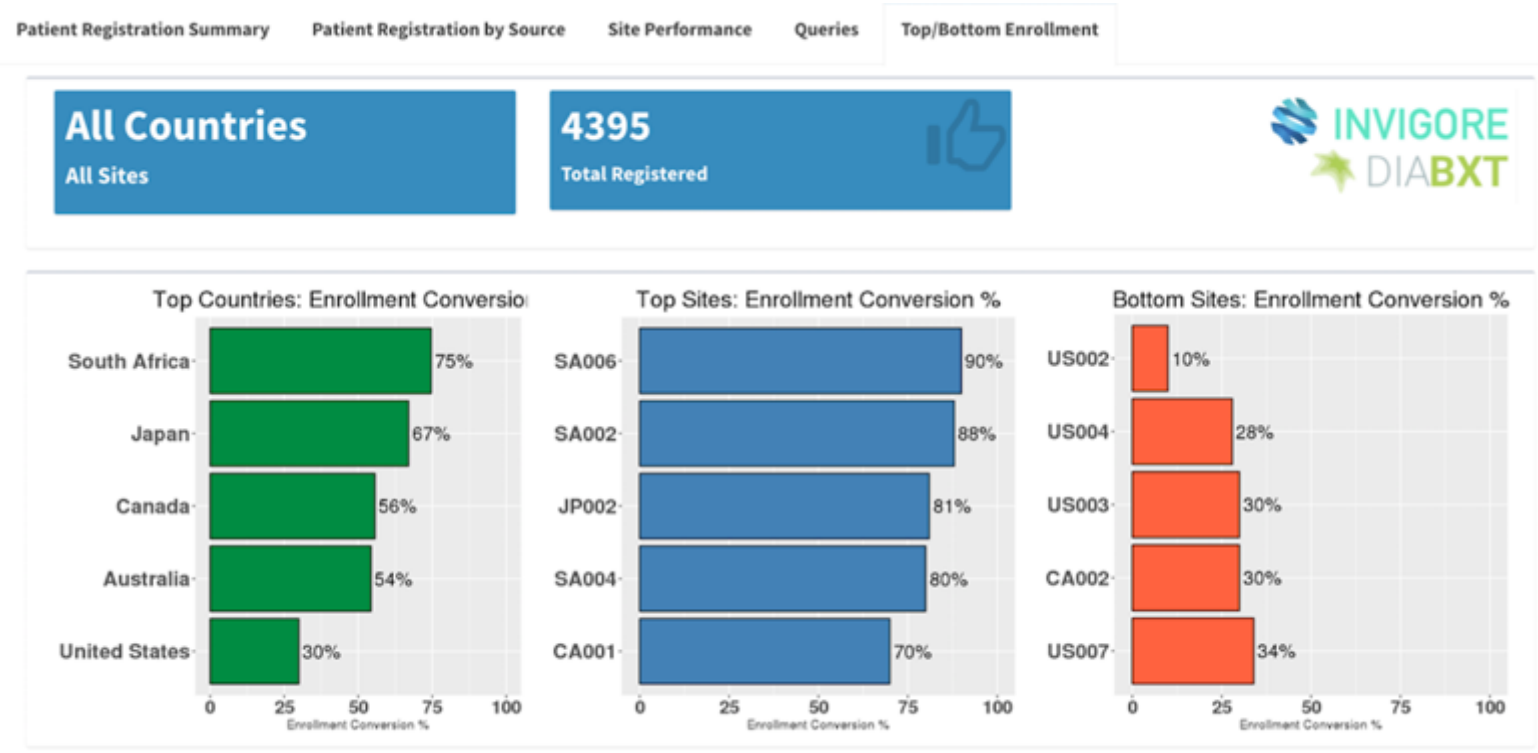
- FRANK BIEN, CEO OF LOOKER, 2016

Data as UX - Evolution

id	name	county	state_code	state	zip_codes	type	latitude	longitude	area_code	population	households	median_income	land_area	water_area	time_zone	
0001	6550	Manchester	Delaware County	IA	Iowa	52057	City	42.48415	-91.45543	563	5087	2141	45451	12565418	39279	America/Chicago
0002	6551	Manilla	Crawford County	IA	Iowa	51454	City	41.88971	-95.23222	712	777	394	44000	2676515	0	America/Chicago
0003	6552	Manly	Worth County	IA	Iowa	50456	City	43.28718	-93.20215	641	1325	530	45000	3796802	0	America/Chicago
0004	6553	Manning	Carroll County	IA	Iowa	51455	City	41.90915	-95.06499	712	1485	661	43125	6439497	17812	America/Chicago
0005	6554	Manson	Calhoun County	IA	Iowa	50563	City	42.52914	-94.53414	712	1627	814	35261	8224582	0	America/Chicago
0006	6555	Mapleton	Monona County	IA	Iowa	51034	City	42.16582	-95.79306	712	1217	634	41364	4152315	0	America/Chicago
0007	6556	Maquoketa	Jackson County	IA	Iowa	52060	City	42.06891	-90.66569	563	6012	2667	34534	11223961	90929	America/Chicago
0008	6557	Marathon	Buena Vista County	IA	Iowa	50545	City	42.86164	-94.98249	712	241	99	33750	1940810	0	America/Chicago
0009	6558	Marble Rock	Floyd County	IA	Iowa	50653	City	42.96525	-92.86853	641	303	161	36250	2148515	97055	America/Chicago
0010	6559	Marcus	Cherokee County	IA	Iowa	51035	City	42.82582	-95.80751	712	1096	501	57898	3981586	0	America/Chicago
0011	6560	Marengo	Iowa County	IA	Iowa	52301	City	41.79806	-92.07074	319	2513	994	45160	5384451	157498	America/Chicago
0012	6561	Marion	Linn County	IA	Iowa	52302	City	42.03417	-91.59768	319	36774	14218	62372	41570298	34529	America/Chicago
0013	6562	Marne	Cass County	IA	Iowa	51552	City	41.45138	-95.11138	712	116	44	56154	1488688	0	America/Chicago
0014	6563	Marquette	Clayton County	IA	Iowa	52158	City	43.04443	-95.17819	563	453	232	27308	4497792	174963	America/Chicago
0015	6564	Marshalltown	Marshall County	IA	Iowa	50158	City	42.04943	-92.90798	641	27727	10014	47860	49937222	68292	America/Chicago
0016	6565	Martelle	Jones County	IA	Iowa	52305	City	42.02167	-91.35989	319	254	121	44583	868800	0	America/Chicago
0017	6566	Martensdale	Warren County	IA	Iowa	50160	City	41.37305	-93.73578	641	464	206	55000	973341	0	America/Chicago
0018	6567	Martinsburg	Keokuk County	IA	Iowa	52563	City	41.17890	-92.25185	641	110	58	60417	971524	0	America/Chicago
0019	6568	Marysville	Marion County	IA	Iowa	50116	City	41.18056	-92.94909	641	66	10	31250	949271	0	America/Chicago
0020	6569	Mason City	Cerro Gordo County	IA	Iowa	50401, 50402	City	43.15357	-93.20104	641	27458	12969	41332	71974380	787135	America/Chicago
0021	6570	Masonville	Delaware County	IA	Iowa	50854	City	42.47943	-91.59127	563	124	59	19688	859152	0	America/Chicago
0022	6571	Massena	Cass County	IA	Iowa	50853	City	41.25415	-94.76831	712	345	160	41250	1794781	0	America/Chicago
0023	6572	Matlock	Sioux County	IA	Iowa	51244	City	43.24387	-95.93530	712	88	37	68125	958409	0	America/Chicago
0024	6573	Maurice	Sioux County	IA	Iowa	51036	City	42.96638	-96.18058	712	277	90	59367	1421033	14621	America/Chicago

LIST

VISUALIZE



DIRECT

Important [more](#)

Clinpal 19/02/2017 11:00 am

Site **US002** has candidate throughput performance issues. Their average time to respond to candidates is **9 days**, compared to **3.1 days** at other sites.

CONTACT SITE



Patient Motivators and Barriers

MOTIVATORS

- ✓ Treatment access
- ✓ Monetary
- ✓ Interest
- ✓ Altruism

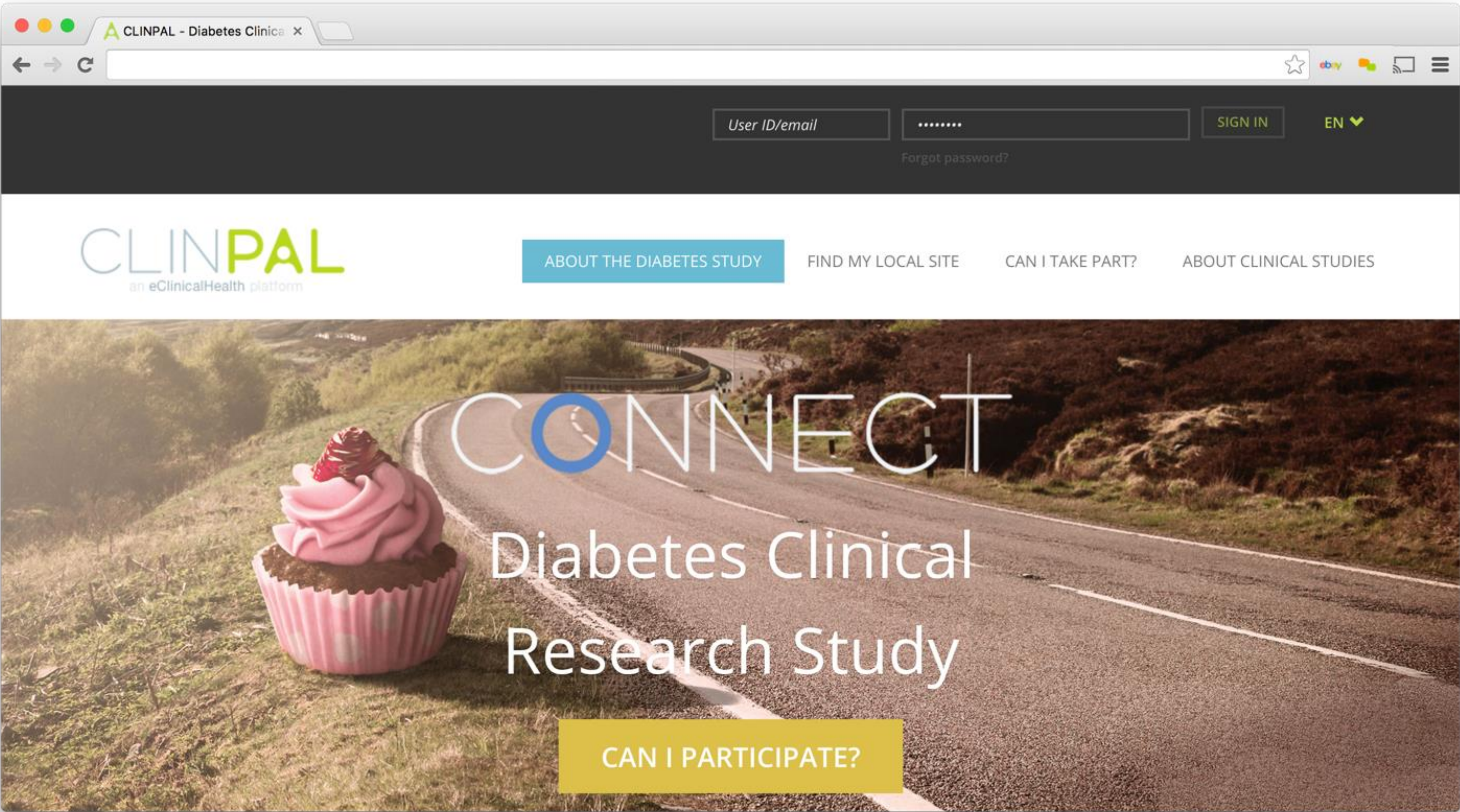


BARRIERS

- ✓ Interventions
- ✓ Burden: time, location inconvenience
- ✓ Misconceptions

Recruitment & Retention is all about ensuring this equation holds true at all times during the patient journey!

First Impressions



Welcome greetings
from Dr. Smith, Study Director

Alex, thank you very much for agreeing to take part in this important research to help us understand the safety of asthma treatments. Through these brief study newsletters, I want to share more information about the research with you and keep you up to date about how we're progressing in the study. In the video below, I have given some background about the study and why your participation is so important for this research.



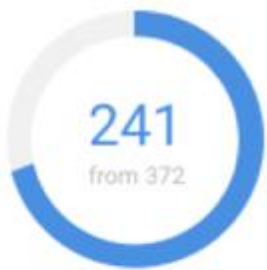
With regards to our progress with the study, I can share the following metrics with you:



Planned / actual patients to be recruited globally



Planned patients to be recruited in the United States



Study sites currently active in the study



Patient home diaries captured to date (from expected)

“Bring Your Own Device”



Support

Home

To-Dos

Schedule

Documents

Profile

Study Progress / Rewards

1

Open

Registered
17.03.2017


To Provide Consent
17.03.2017

Patient Consented
17.03.2017

Patient Enrolled
17.03.2017

Baseline Complete
17.03.2017

So what happens after Baseline?



You have completed your initial Baseline visit. That means you are well underway.

Keep a close eye out for further tasks to be performed. You will receive **Email** notification or **Text** messages that will provide a link allowing you to return here.

As a reminder, this is your personal webpage to help you through the clinical trial process.

Important tasks and messages are displayed below. Thank you for your support!

Important

SITE TO PATIENT MESSAGE

US1 Site Investigator 2 - Hannah James

Patient Message

Dear Hannah, I just wanted to remind you about your appointment next week. Please watch the instructional video in Clinpal before the visit. We look forward to seeing you soon.

MESSAGES

Documents

Suitability

Consent Form

SF-12 Health Survey

About the Study

More about Diabetes

Informed Consent Explained

Secure https://i

Welcome back

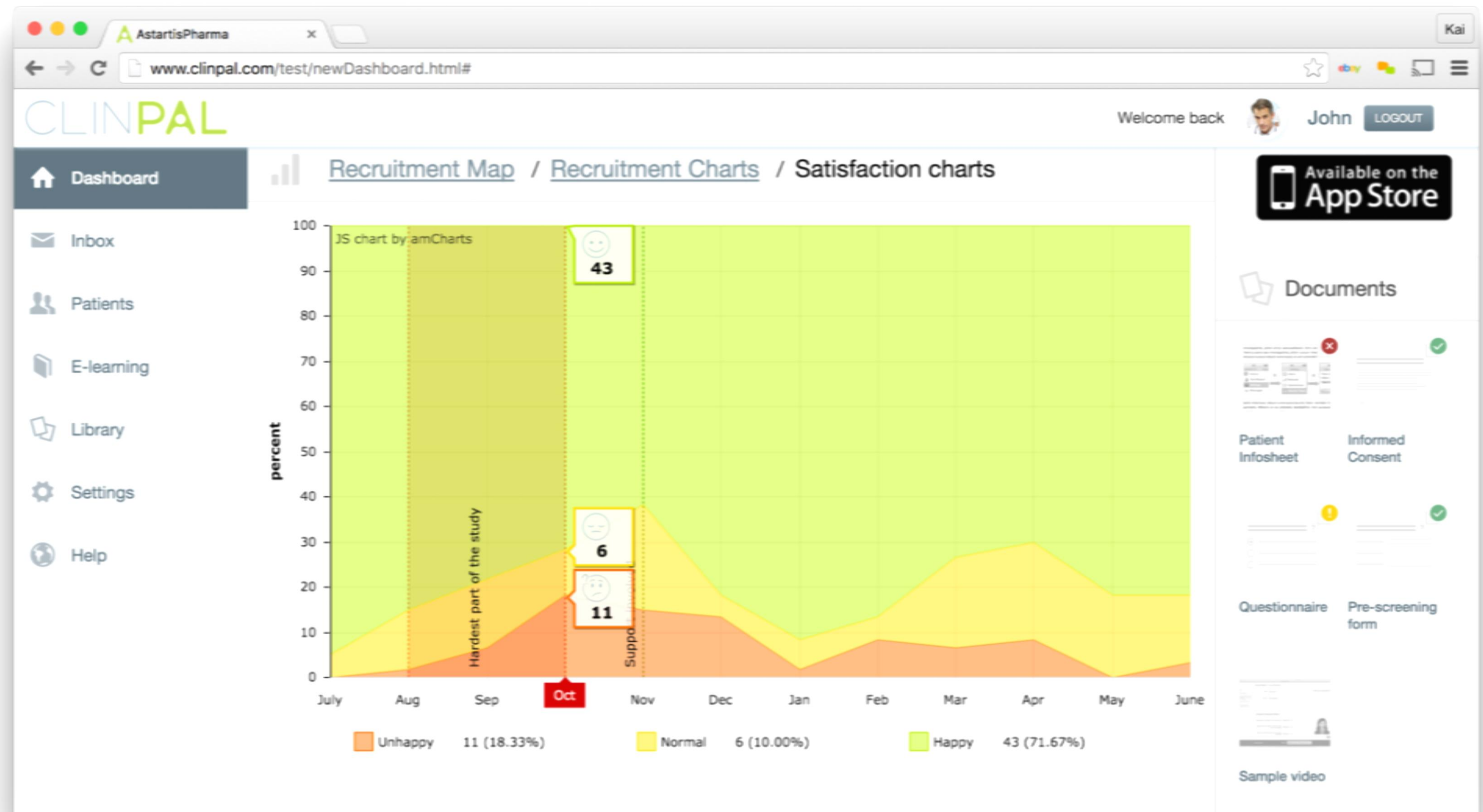
Hannah James

 English LOGOUT

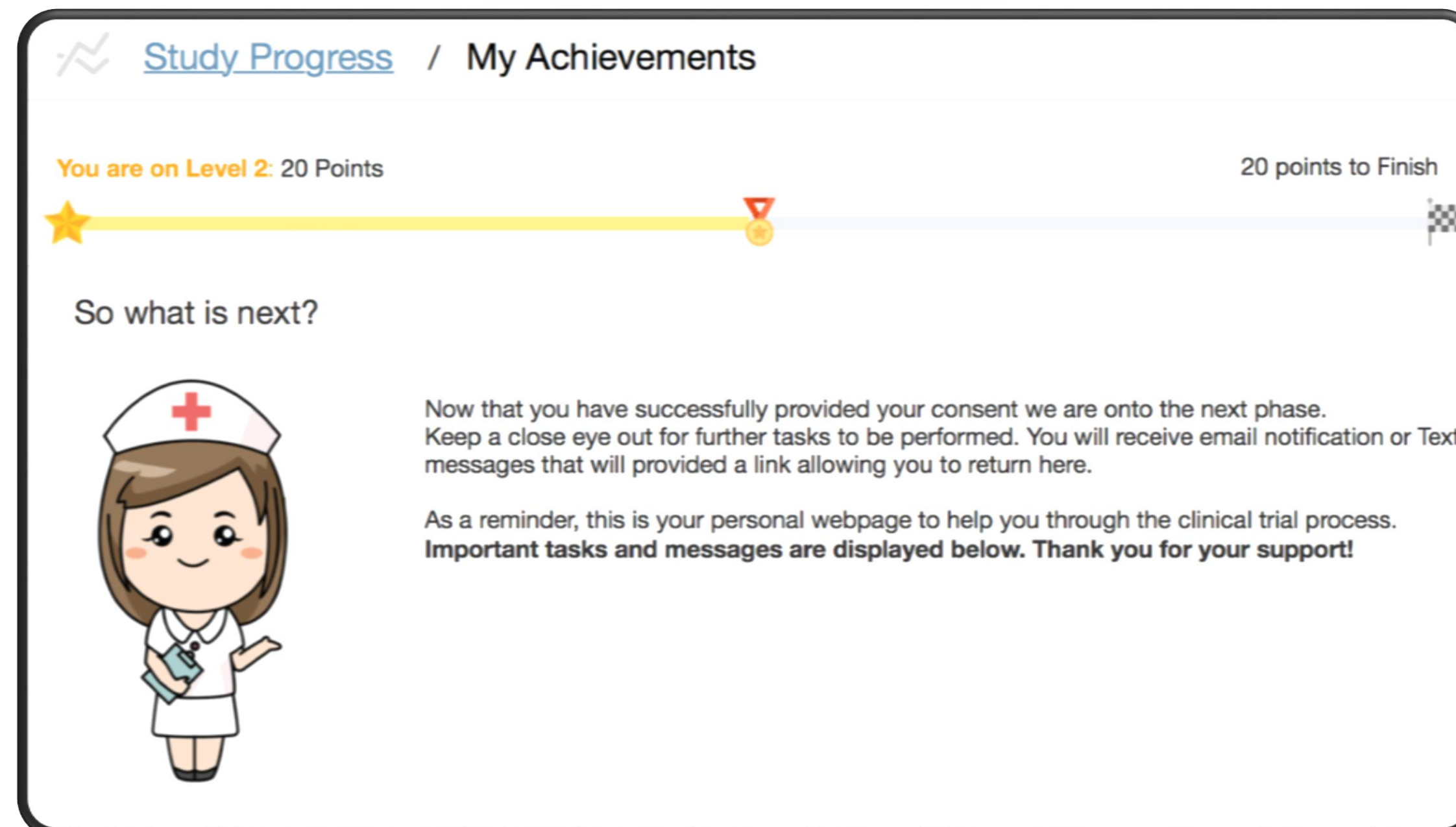
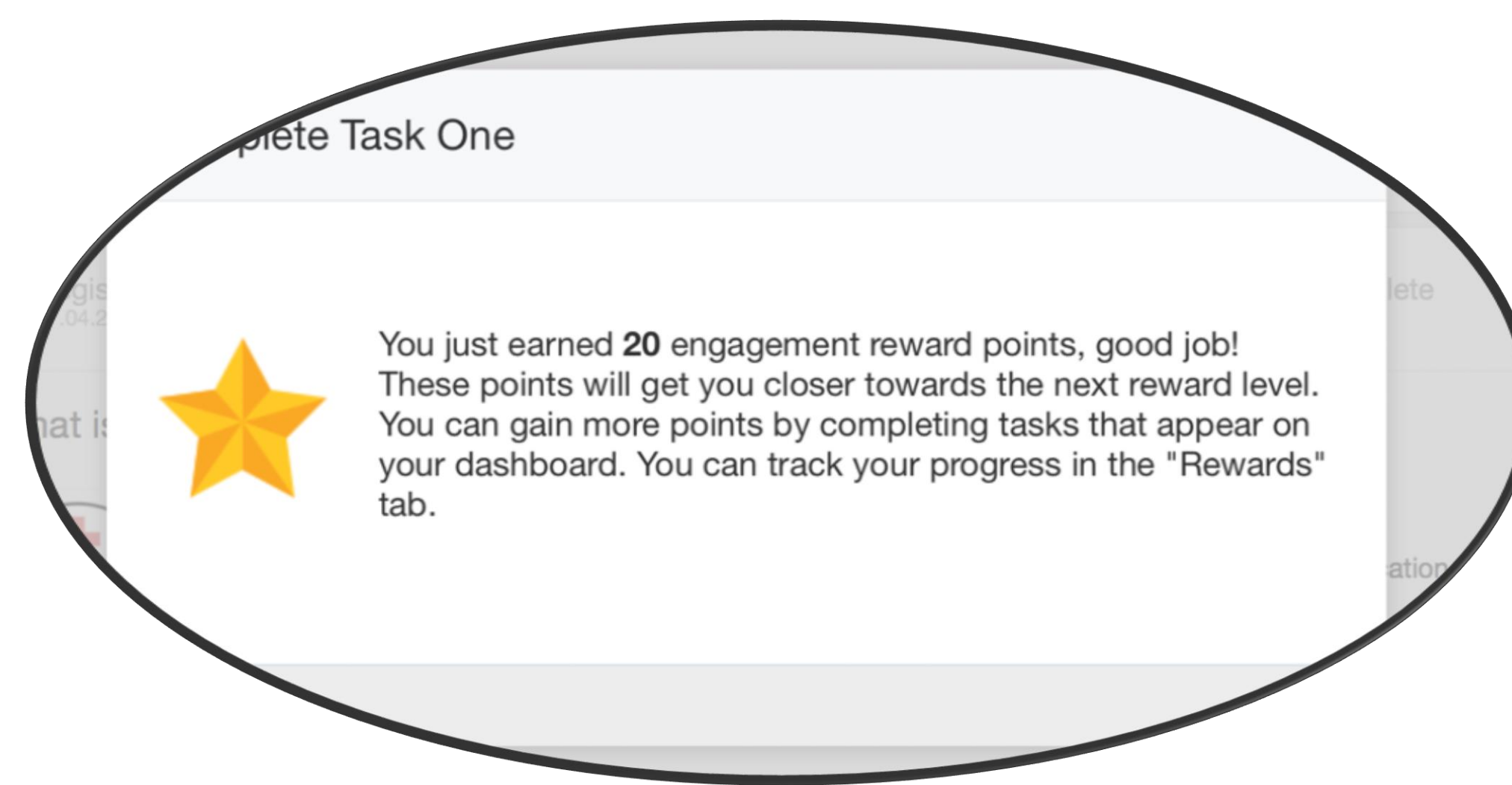
Kai

Measure Satisfaction

What did you think about your initial enrollment into this study?



Provide Feedback



Study Models



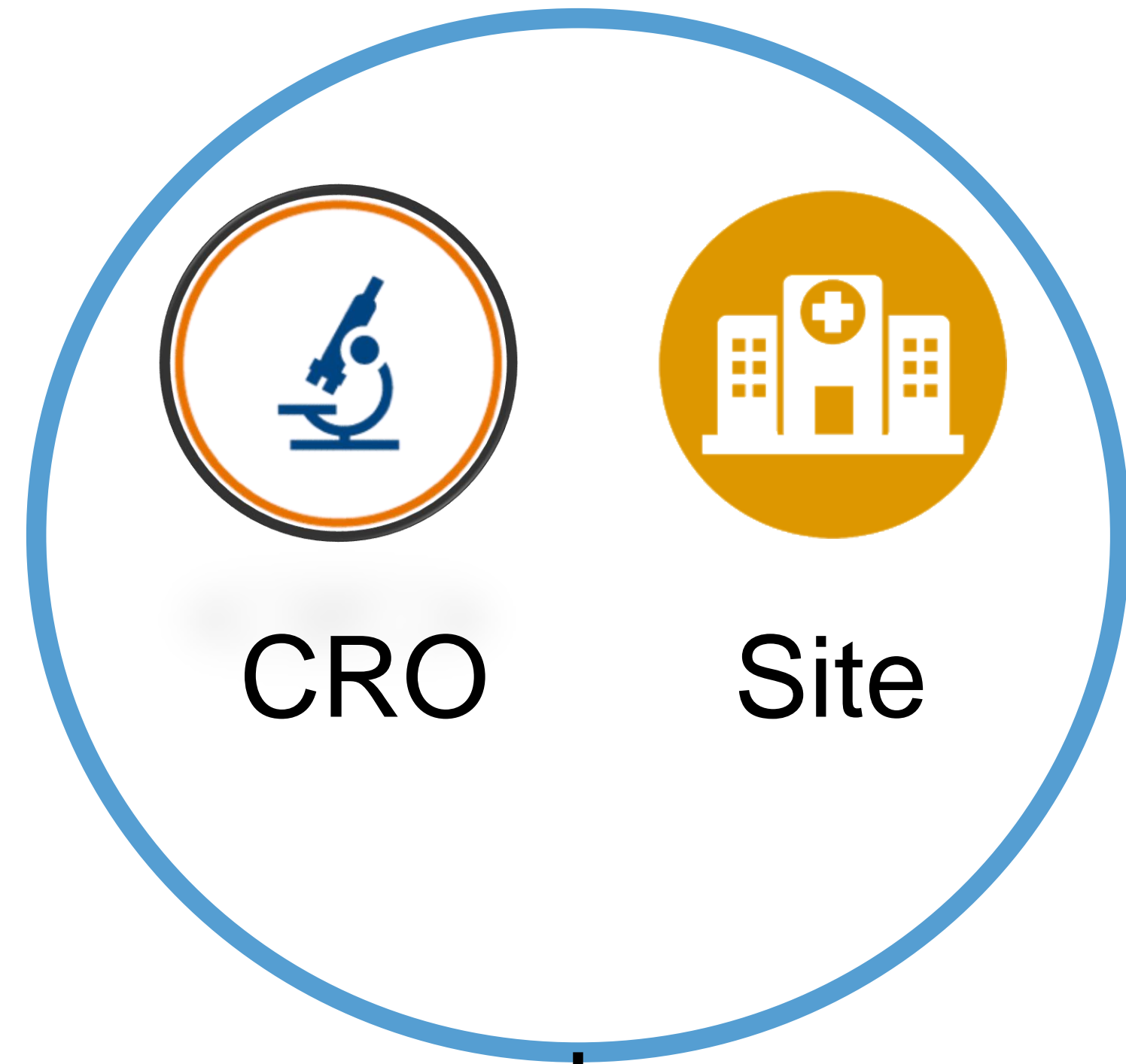
TRADITIONAL SITE- CENTRIC MODEL

- High dependency on sites
- High involvement of the CRO to manage sites
- Most activities are site-driven and only supported by



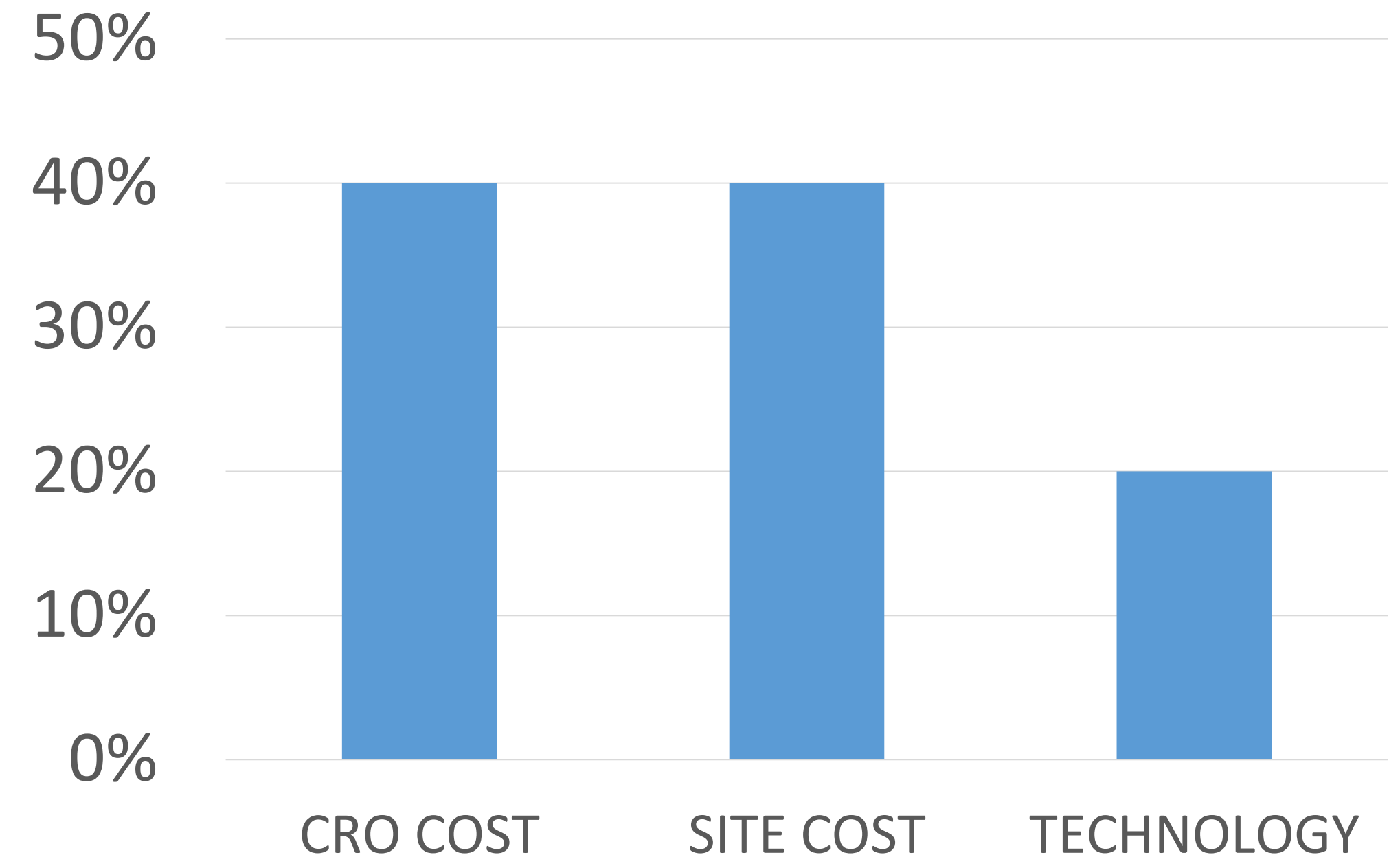
TRADITIONAL SITE- CENTRIC MODEL

- Slow to start-up due to high dependency on physical sites
- Paper source data
- Resource intensive to manage



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Relative Trial Costs



Cost



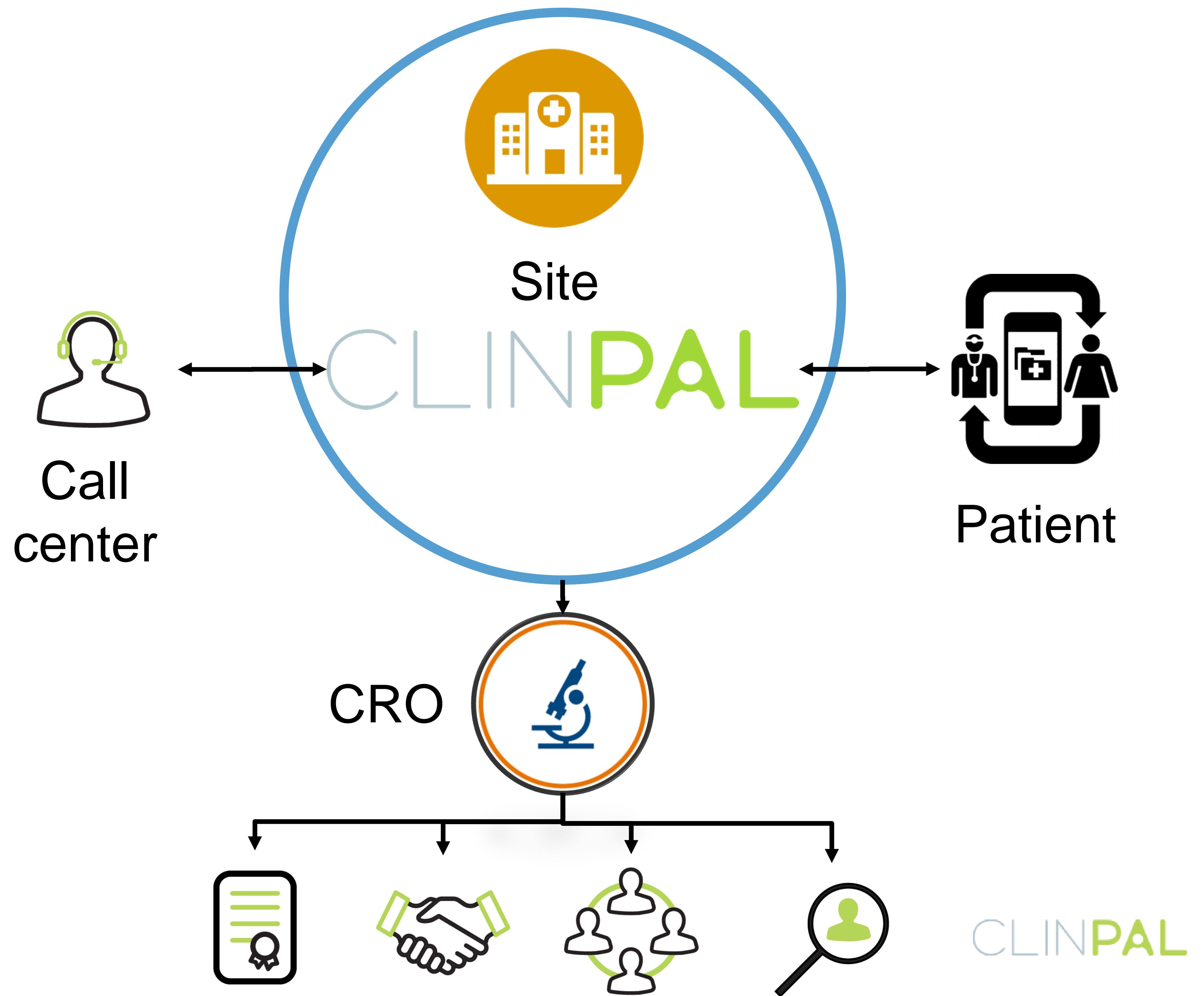
Data Quality



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HYBRID MODEL

- Less dependency on the CRO
- Sites still involved, but operate more efficiently
- Some patient services are virtualized (call center, reminders, education...)

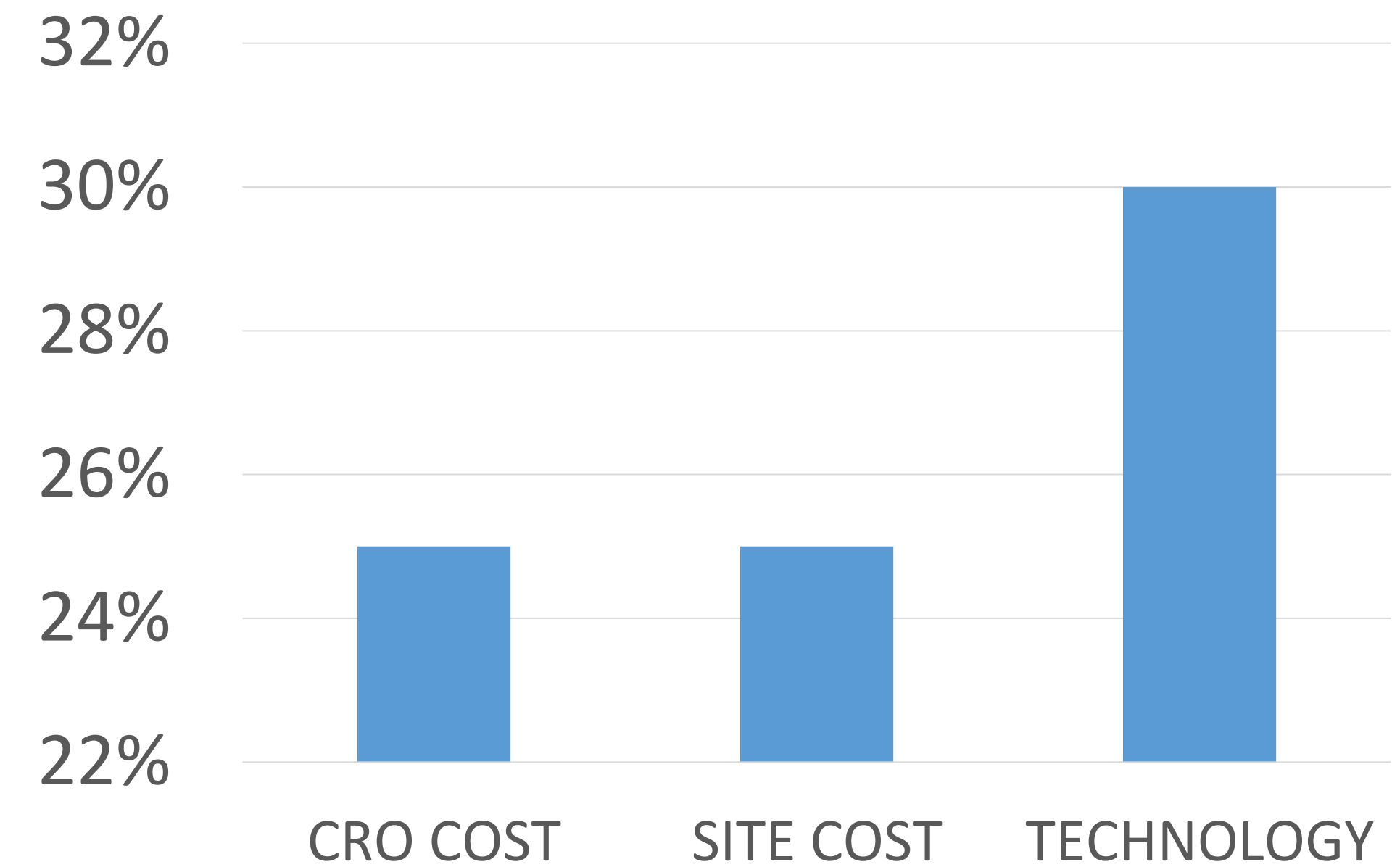


HYBRID MODEL

- Start-up is faster and management more efficient due to automation
- Increased quantity of eSource
- Less dependency on the CRO
- Technology driven



Relative Trial Costs



Cost



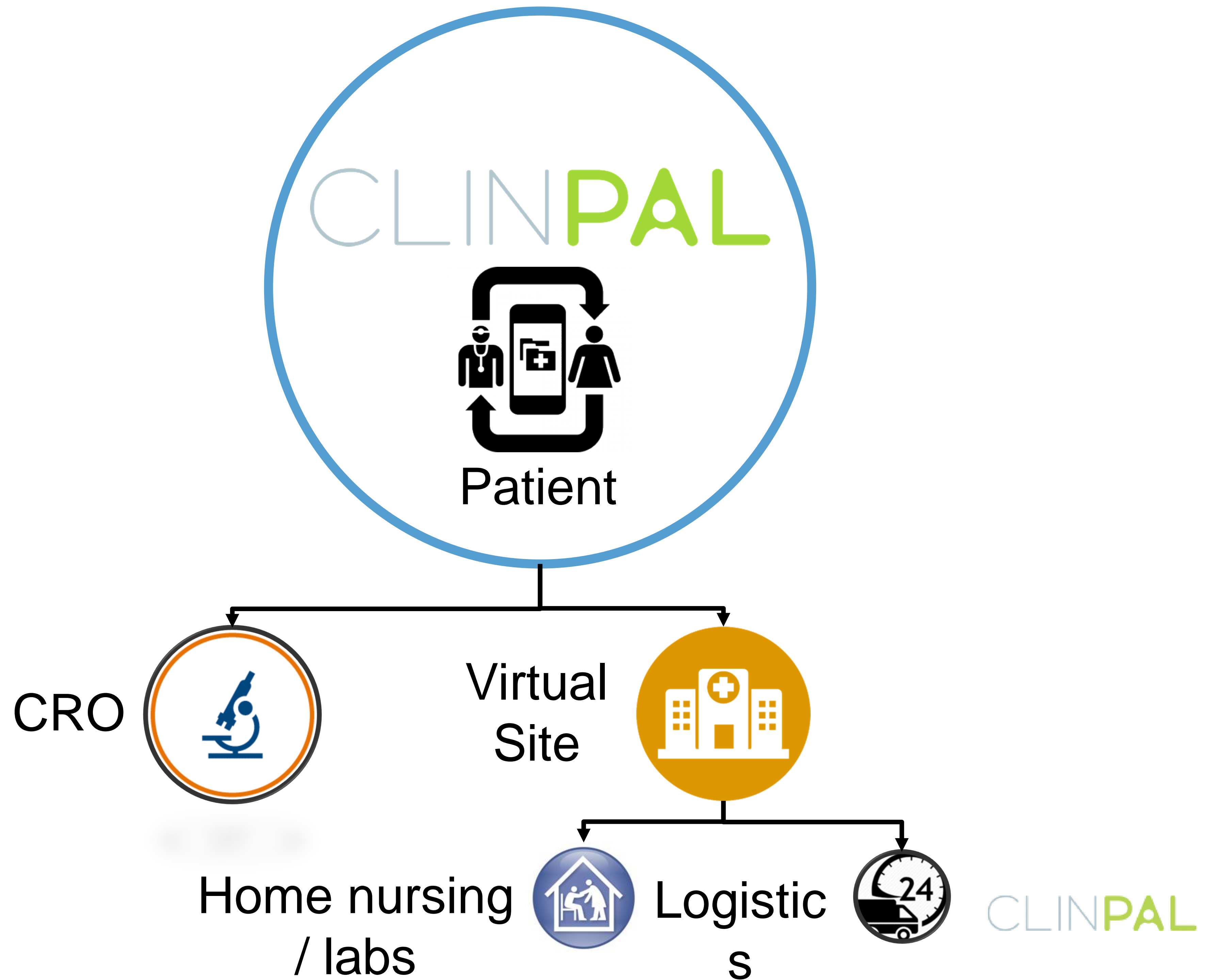
Data Quality



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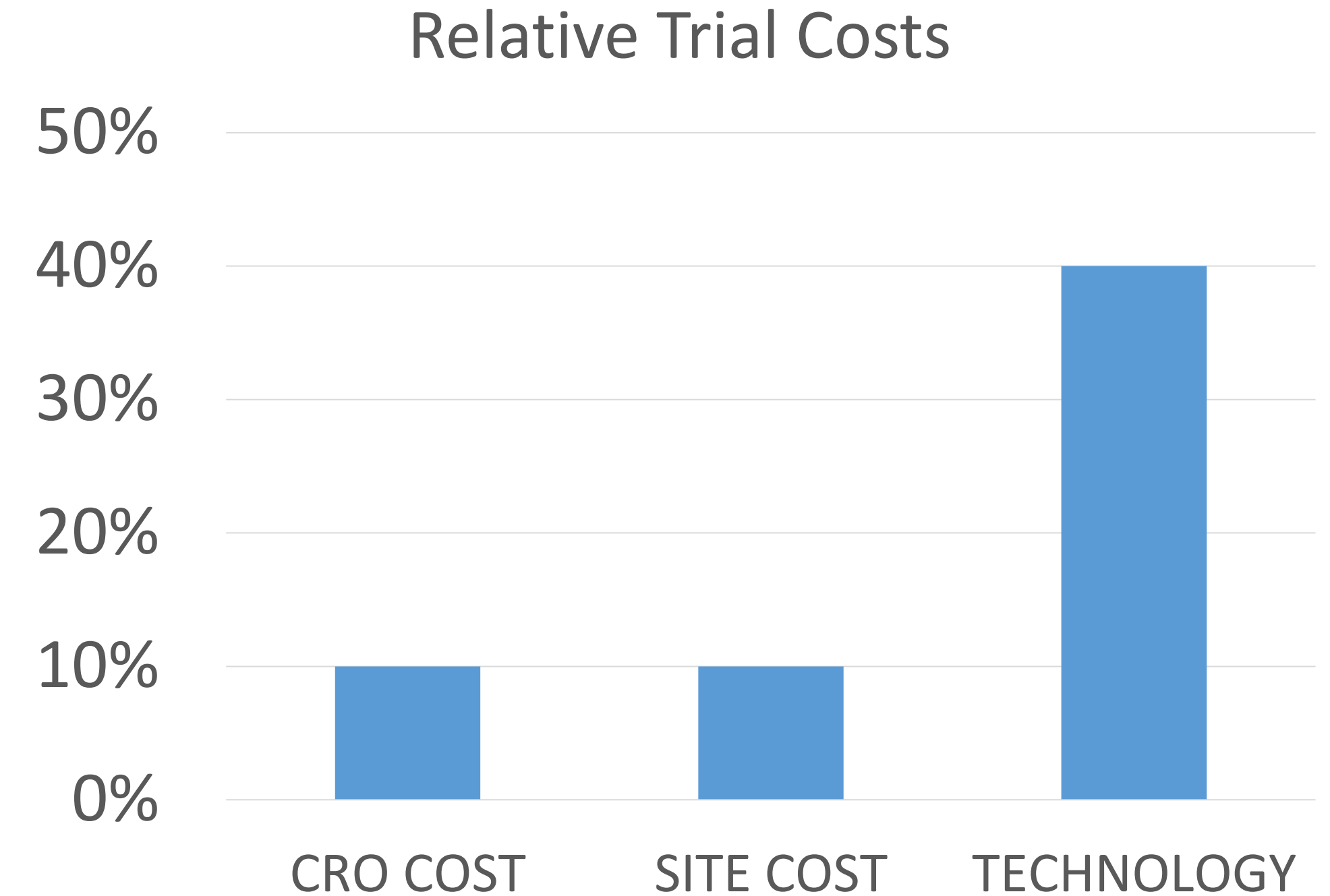
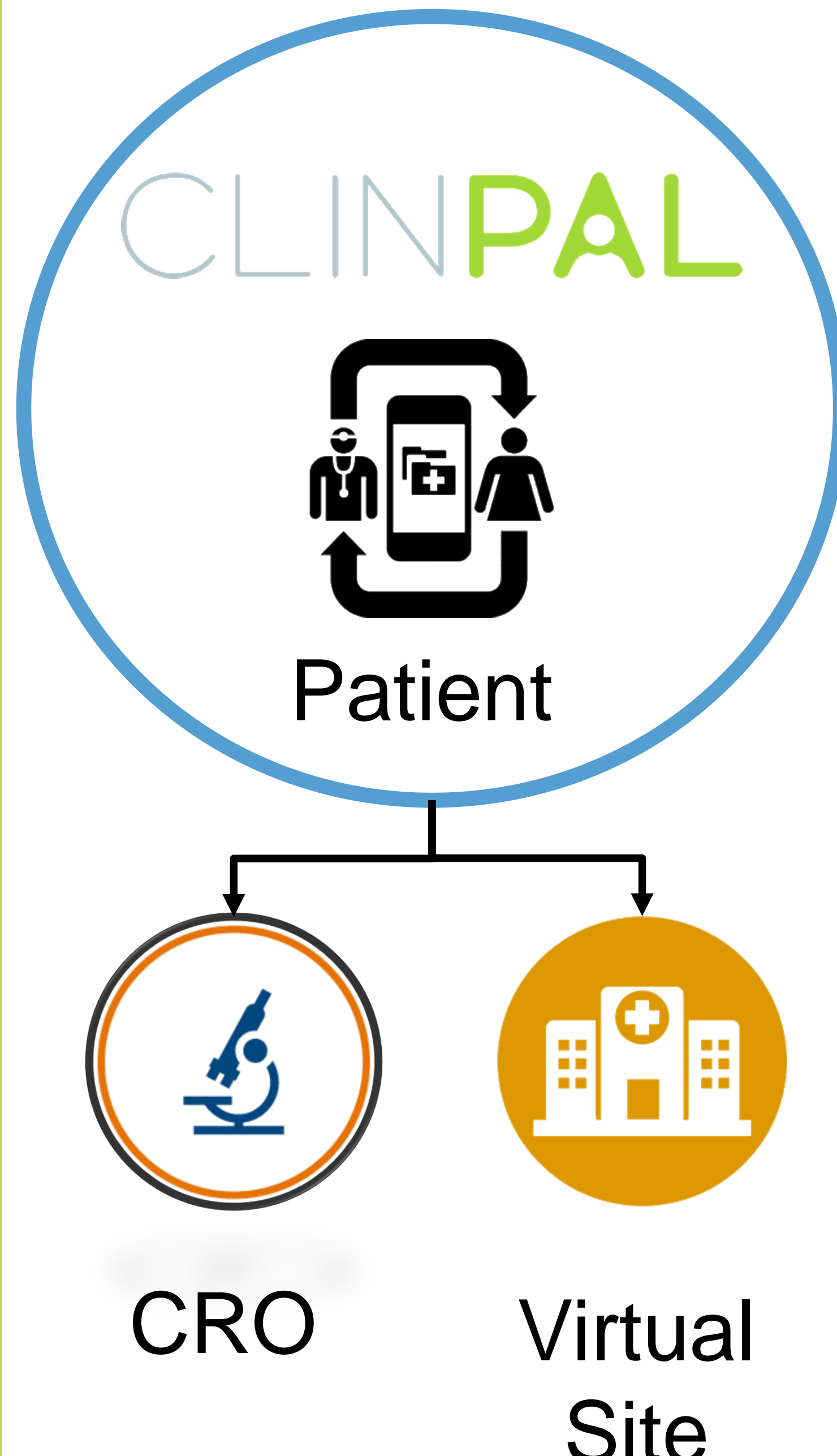
PATIENT & TECHNOLOGY CENTRIC MODEL

- Less dependency on the site (remote / semi-remote)
- Patients directly more involved
- Minimal / no involvement of the CRO



PATIENT & TECHNOLOGY CENTRIC MODEL

- Very fast start-up with no near-zero dependency on sites
- Reduced monitoring & management as most data is eSource
- Highly adaptable to accommodate in-life changes



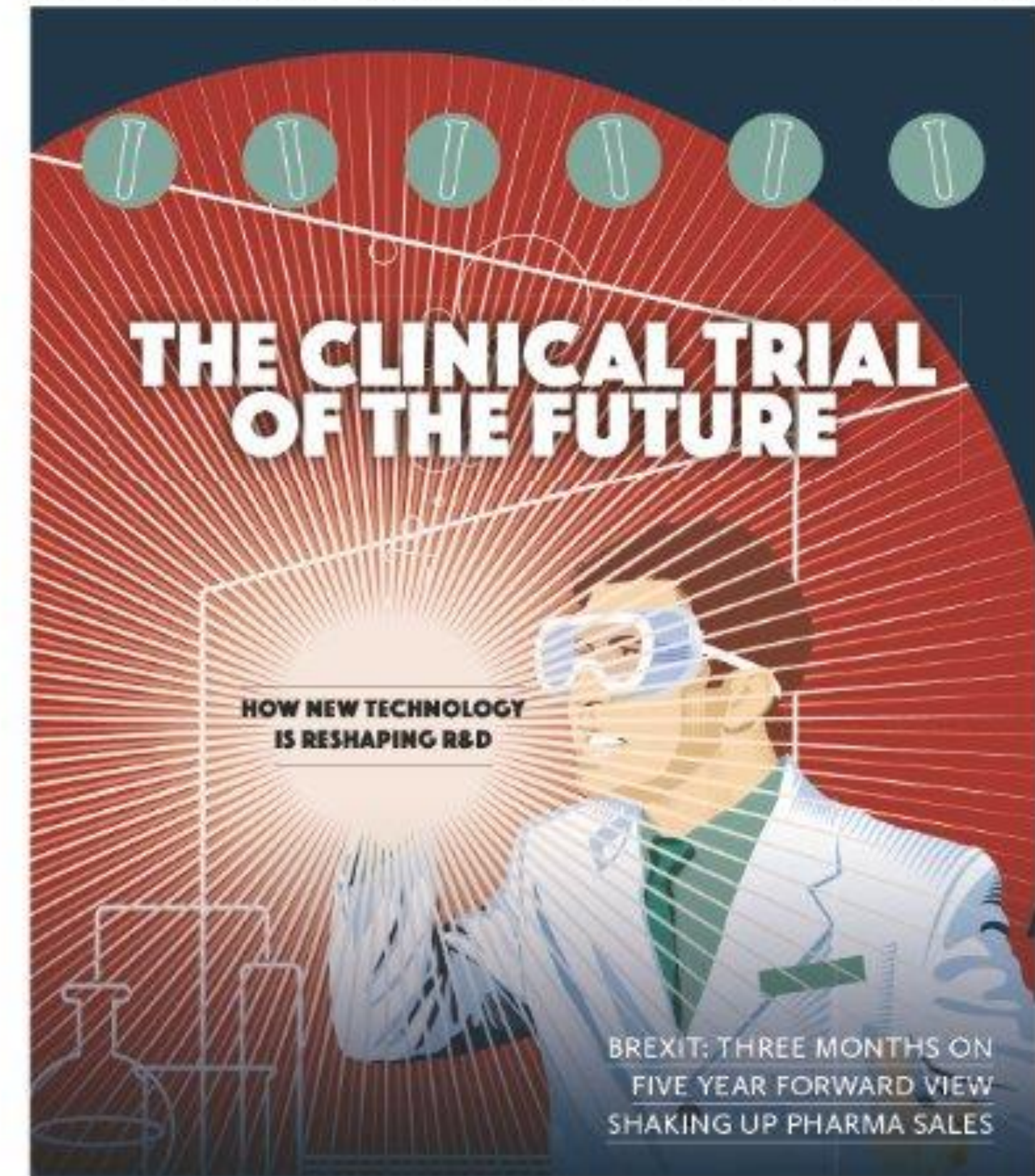
Case Study: Digital Engagement

PharmaTimes

OCTOBER 2016 @PharmaTimes

MAGAZINE

KICKSTARTING HEALTHCARE CONVERSATIONS



Registering Device

ClinPal : Document - Regis x

https://verkko.clinpal.net/clinpal/patient?locale=en#patientDocument?document=54d22e130cf2b53e2ea0b028:~

VERKKO

Questionnaire - Registering your device

Back to: VERKKO

Registering your device

Registering your device

Registering your device

Please follow the instructions below to receive your security token

2014/01/17 15:00

- History
- Test Wizard
- Settings
- Messages

Settings

- Alarm
- Network
- Synchronize
- Security Token

Security token

Your security token is (numero)

Confirmation ✓

Please enter your security code here

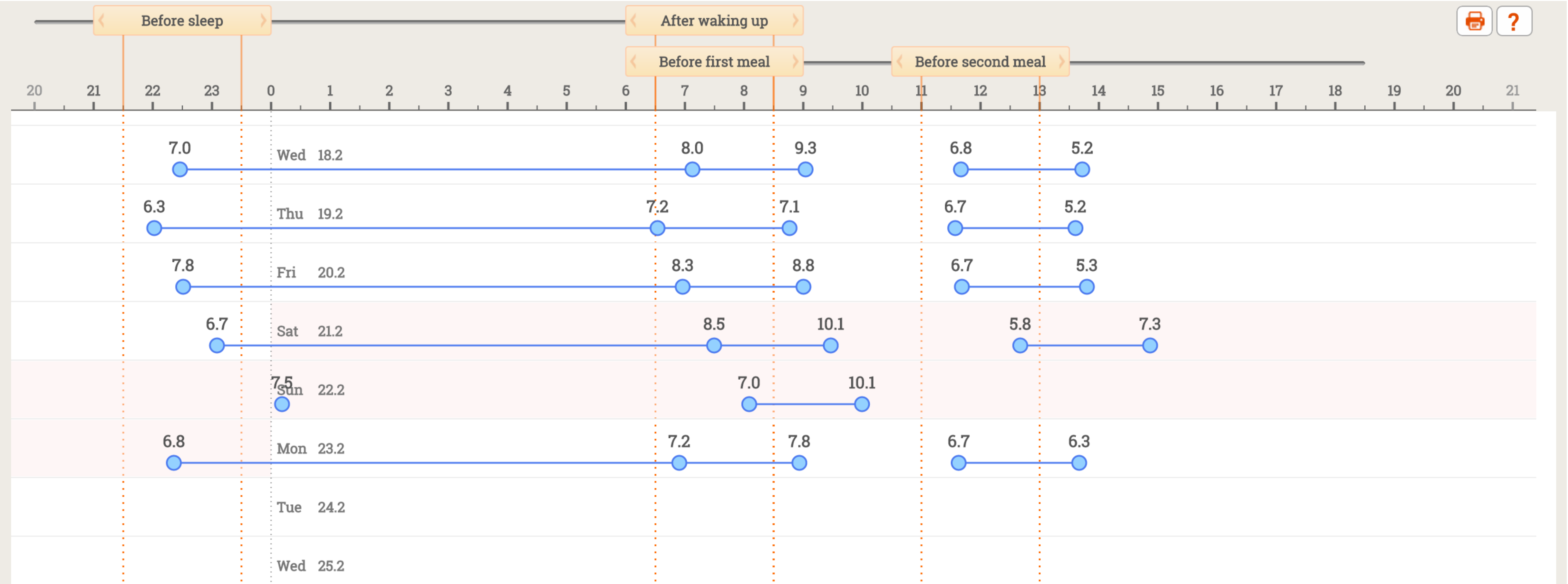
324234

REGISTER DEVICE

Back: VERKKO

ENGAGED BY CLINPAL

Logbook View



Personal Compliance Dashboard for Patients



Complete profile

Valmistuneet verensokeriprofiilit

20.9.2014 - 30.9.2014

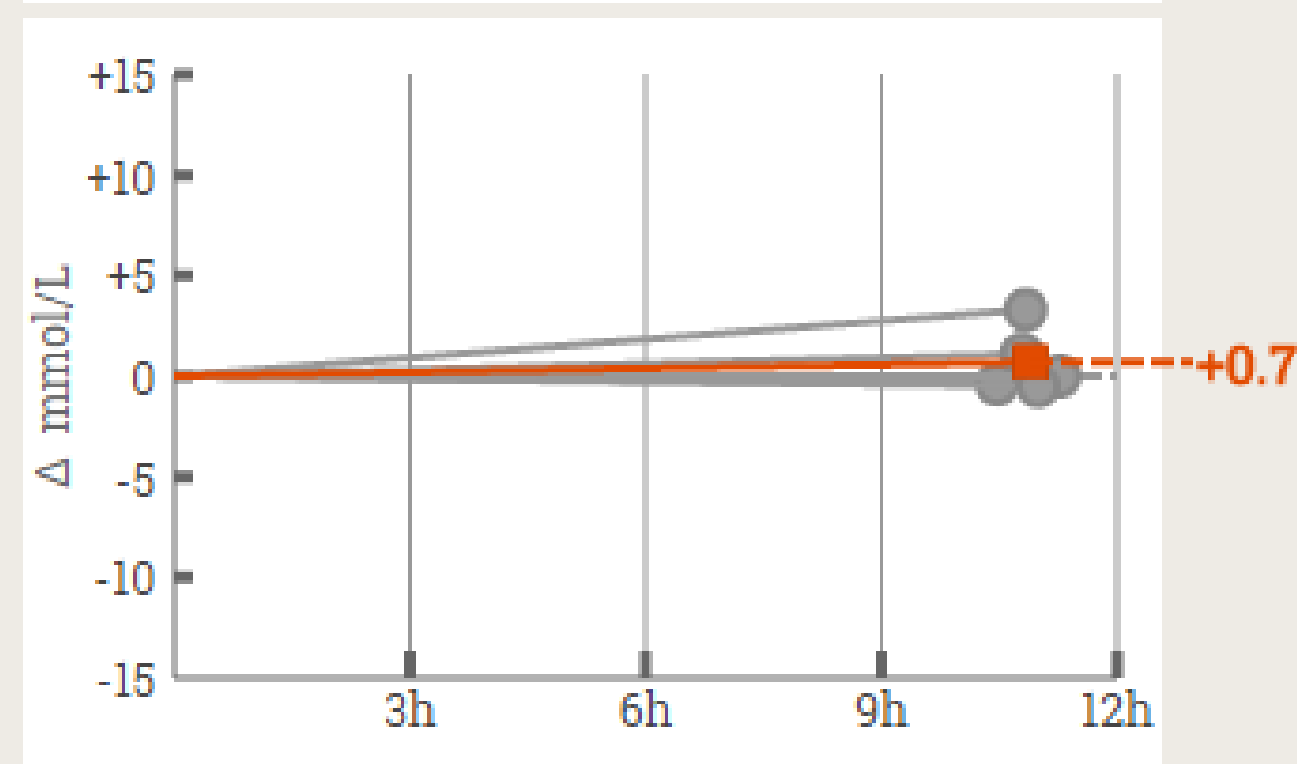
Piilota

✓ Onnistuneesti suoritettu. Analyysi saatavilla.

Verensokeriprofiilin analyysi: 20.9.2014 - 30.9.2014

Muutos yön yli

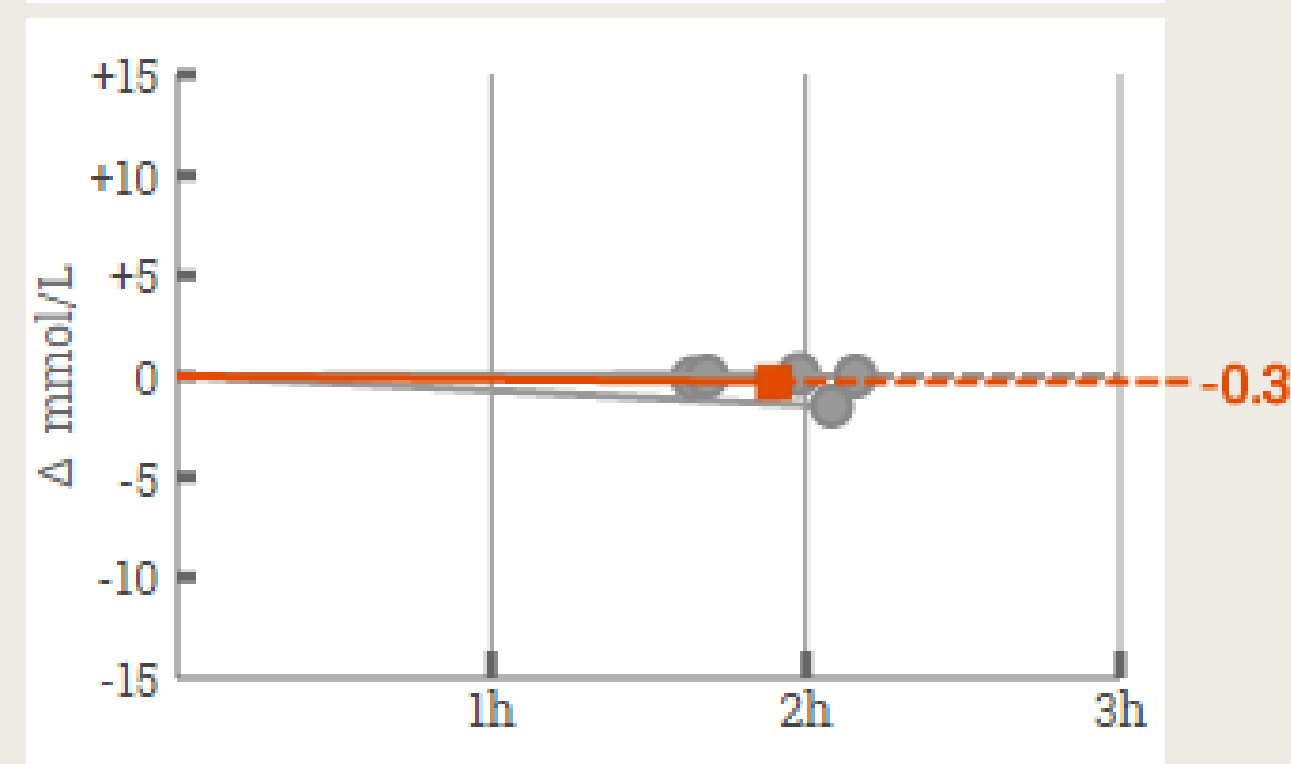
 8.2 mmol/L  8.9 mmol/L



Keskimäärin verensokeri nousee **0.7 mmol/L**.
Muutoksen vaihtelu on **3.8 mmol/L**.

Muutos ensimmäisellä aterialla

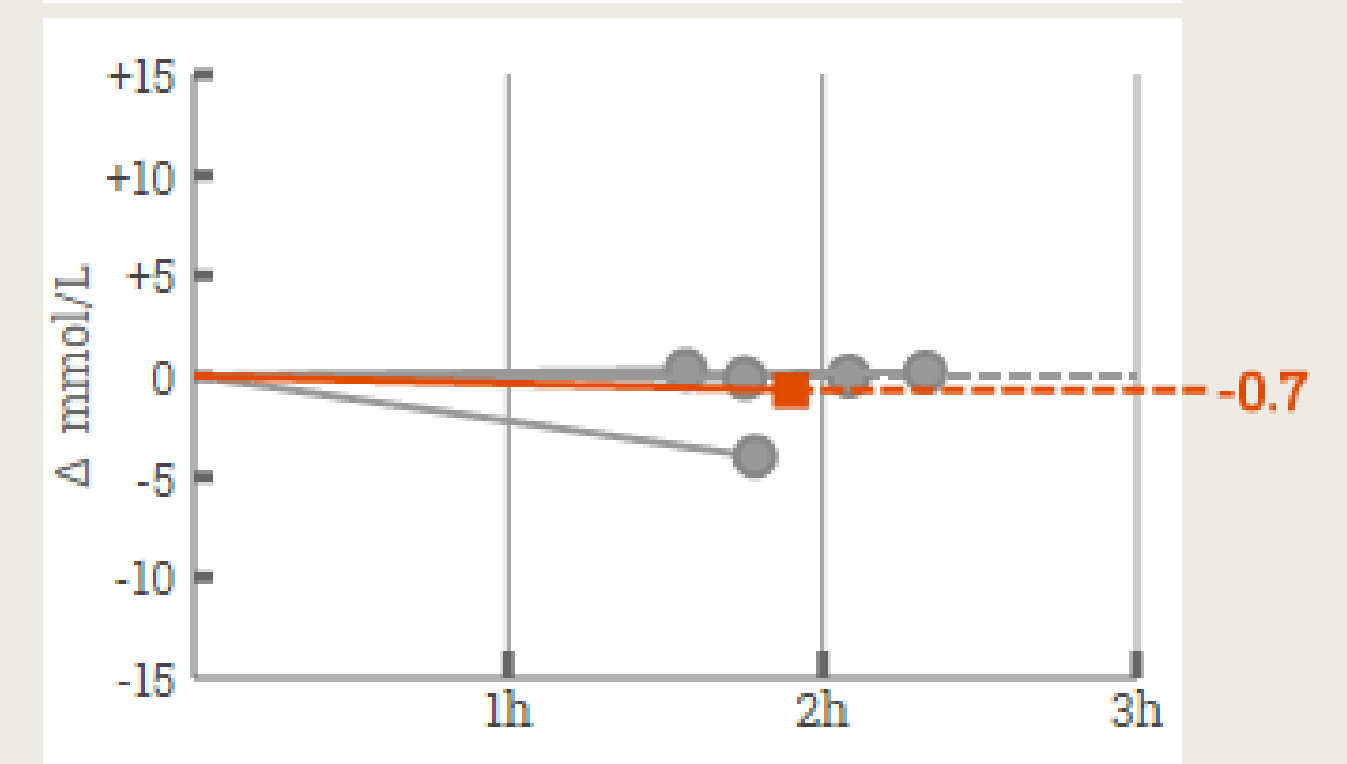
 8.2 mmol/L  7.9 mmol/L



Keskimäärin verensokeri laskee **0.3 mmol/L**.
Muutoksen vaihtelu on **1.6 mmol/L**.

Muutos toisella aterialla

 8.9 mmol/L  8.2 mmol/L



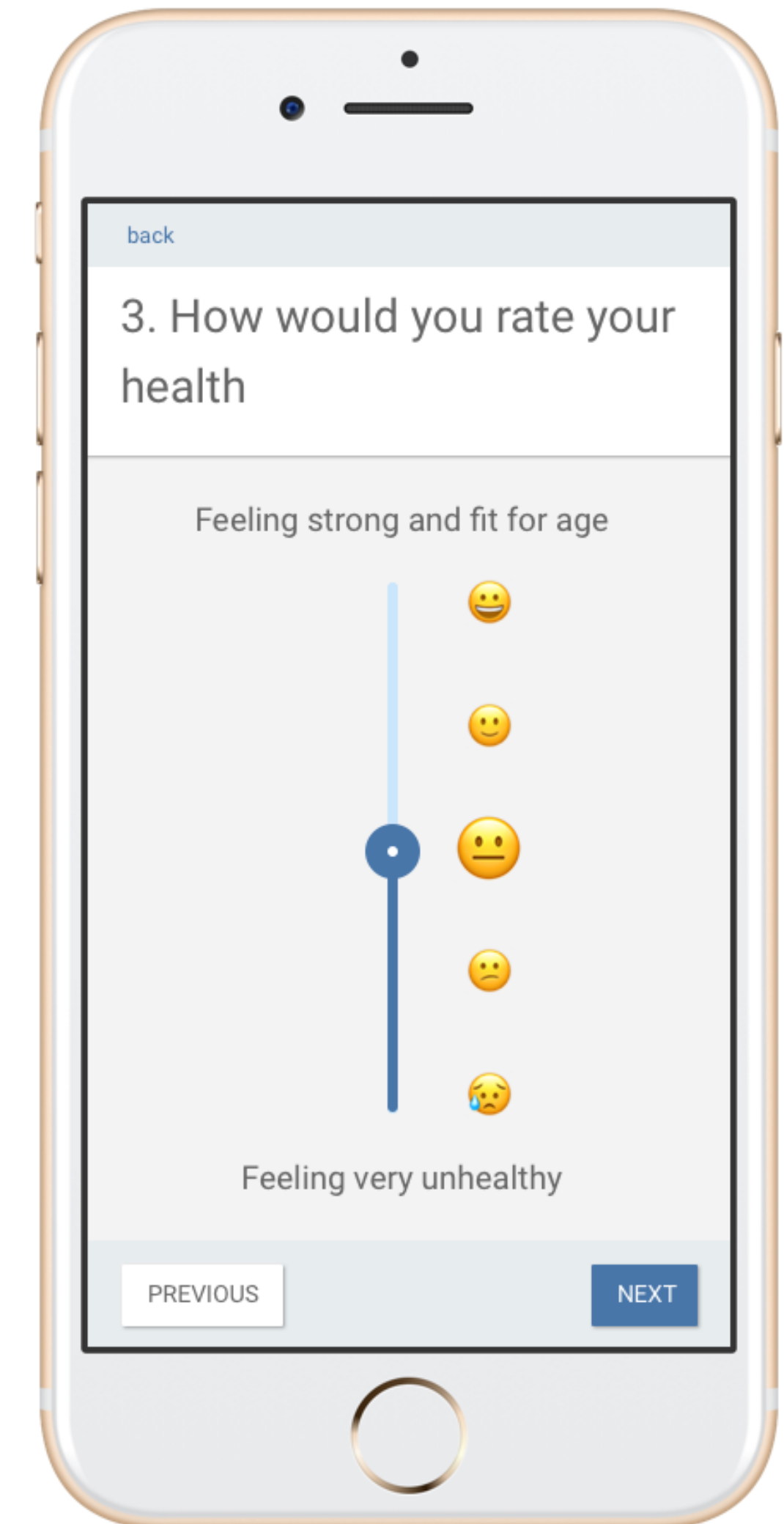
Keskimäärin verensokeri laskee **0.7 mmol/L**.
Muutoksen vaihtelu on **4.3 mmol/L**.

VERKKO REMOTE STUDY

FINAL RESULTS VS.
COMPARATOR STUDY

- 90.8% patient satisfaction score
- 18% increase in compliance
- 22% faster profile completion
- 56% increased recruitment rate
- 300% increased site efficiency in managing patients

“This study was the most convenient diabetes clinical trial I have ever participated in.” – Satu Vehkavaara, MD, Principal Investigator



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PATIENT FEEDBACK

- 100% exit survey response rate
- Total of 121 comments from 47 participants



That's how monitoring
a chronic disease
should look like!



Easy to use - helped
with taking part in
the study



Fantastic, when will
it be in general use?



Nice to see online
where we're going



Easy as haymaking!

Thank You!

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Get in Touch!

Visit us at www.clinpal.com

Email: klangel@eclinicalhealth.com

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