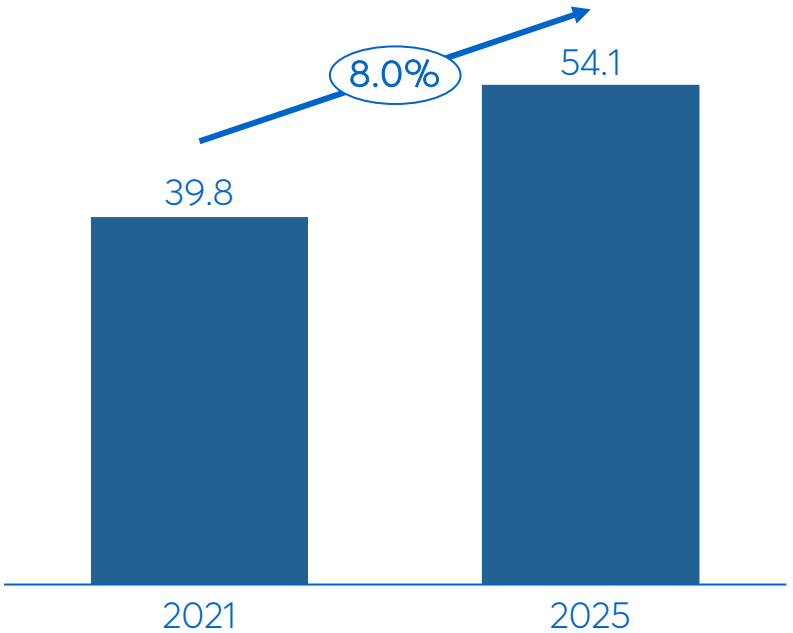


How the supply chain will need to adapt to support the growth of Decentralized Clinical Trials

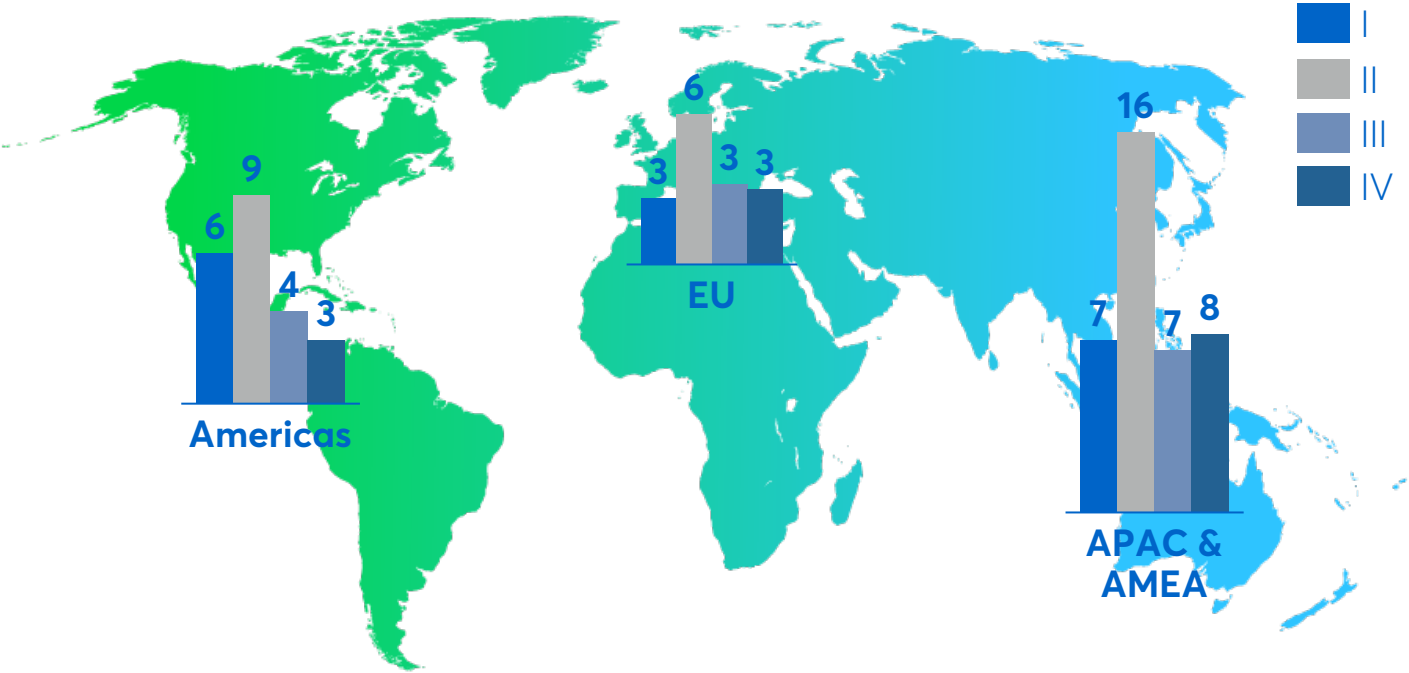
Claudia Berrón

Continued growth of clinical trial landscape with increasing global reach

Clinical Trials Market
Estimate \$B



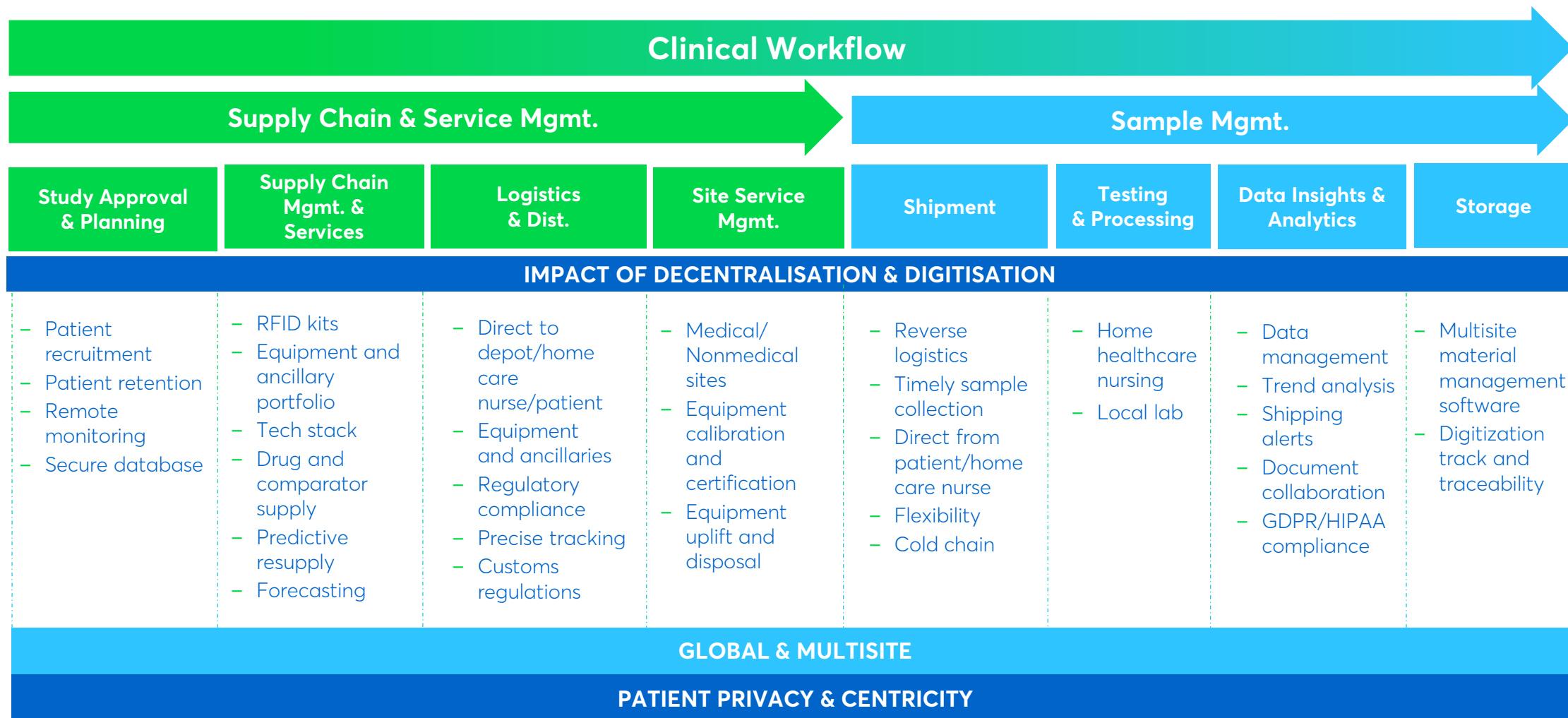
Global & multisite trial with strong regional growth
#’000 Active Clinical Trials



High-complexity, large-scope, global trials will continue to grow, with an estimated 20% of trials running in a decentralized structure – hybrid trials dominating active trials vs. fully virtual leading in post-market surveillance state IV.

Sources: Grand View Research 2021 / GlobalData 2/2022

Decentralization impacts every step of the clinical workflow



Decentralization and digitization go hand in hand



DECENTRALIZATION & DIGITIZATION



PATIENT CENTRICITY

- Enrollment
- Engagement
- eConsent
- ePRO
- Retention



PRODUCTS

- Intuitive
- Medical
- Nonmedical
- Preloaded
- Integrated
- "Out of the box"



DATA

- Fundamental/validation
- Quality & integrity
- Compliance
- Multisite collection
- IoT
- eCOA
- Privacy



ANALYTICS

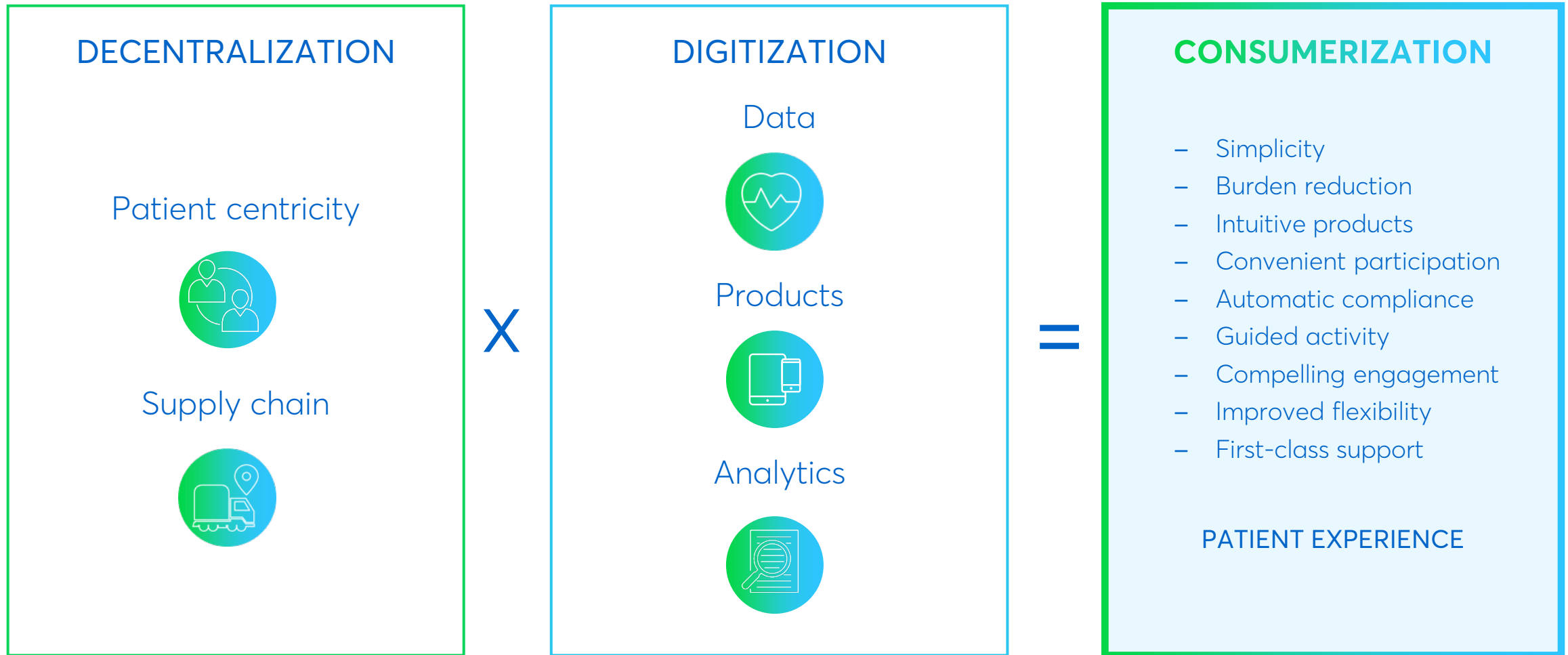
- Reduce risk/increase speed
- Real-time
- Predictive
- AI
- ML
- Safety monitoring
- Guided interventions



SUPPLY CHAIN

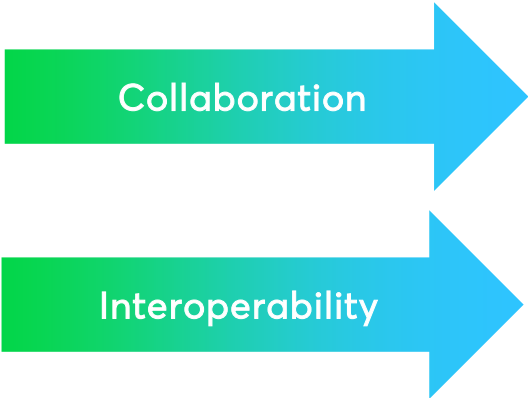
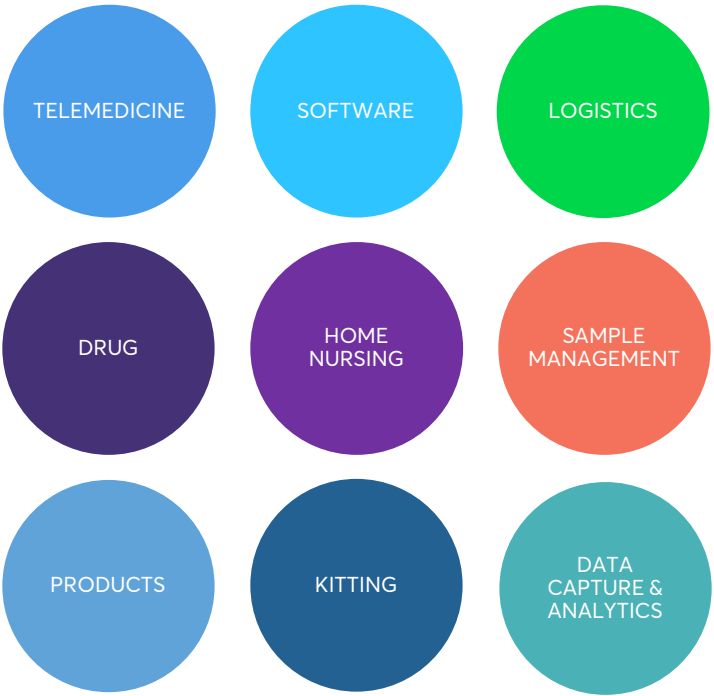
- Integration
- Visibility
- Real-time
- End-to-end

Decentralization & digitization leading to change in patient expectations

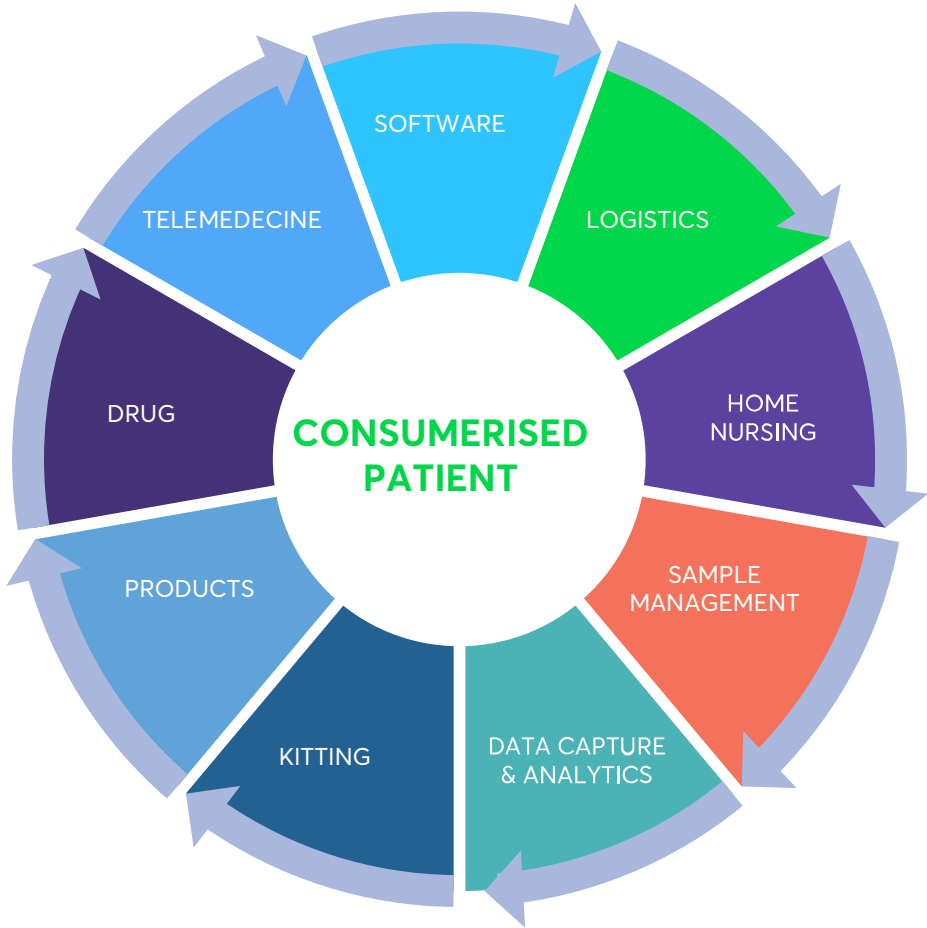


The supply chain challenge of consumerization

STAND-ALONE EXPERTS



COLLABORATIVE EXPERTISE

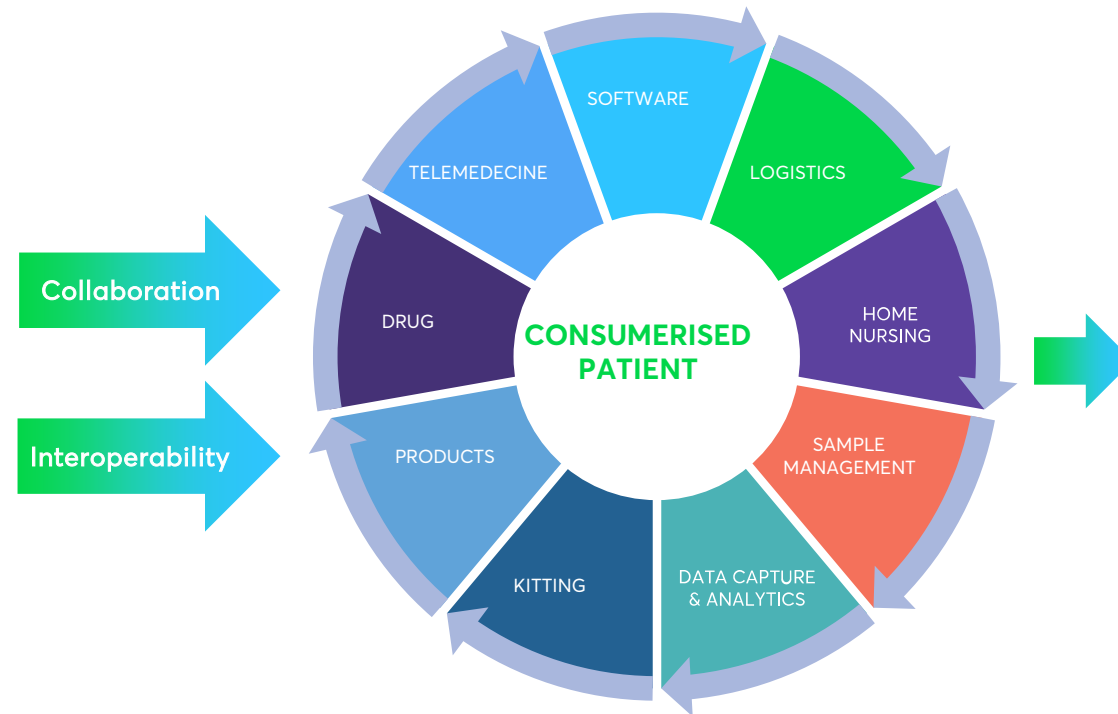


Collaborative ecosystem ultimately improving time to market

STAND-ALONE EXPERTS



COLLABORATIVE EXPERTISE



BENEFITS TO THE SPONSOR

- Improved patient recruitment and retention
- Reduced cost
- Increased efficiencies
- Better patient representation
- Stronger data submissions
- Superior success rates



**DRUG
TO MARKET
FASTER**

Our experiences – in conclusion



7 DCT Diabetes, MS, Hepatitis B, COVID, Oncology Phase I/II/III c.240-800 Patients/Trial c.2-3 Yr Duration CRO & Sponsor US/EUR/APAC Sites

- Early, emergent signs of DCT adoption
- Adoption curve of virtual DCT solutions – comfort with hybrid model
- Site and depot remain key supply chain entities
- New vendor partners entering supply chain – particularly home healthcare nursing
- Patient data protection needs additional consideration throughout supply chain – especially for direct-to-patient
- Not wholesale usage of digitized technology suite – scales, CGM, BPM still significant alongside “consumer wearables”
- Openness to connect systems, but long road to achieve full connectivity

Our experiences – in conclusion



7 DCT Diabetes, MS, Hepatitis B, COVID, Oncology Phase I/II/III c.240-800 Patients/Trial c.2-3 Yr Duration CRO & Sponsor US/EUR/APAC Sites

- Not everyone set up to take full advantage of decentralized clinical trials
- Still some way to go toward fully virtual DCTs
- Vendors and CROs/sponsors need to collaborate to achieve a consumer patient experience & unlock all DCT benefits