Enabling Successful Digital Transformation At Scale

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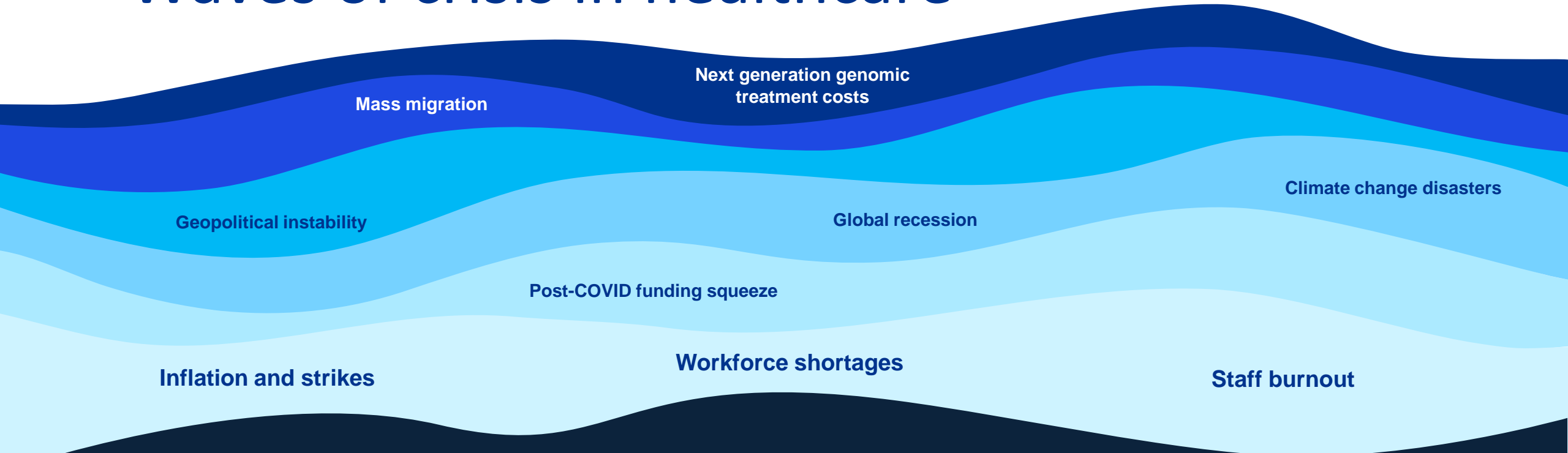
Healthcare's perfect storm

Waves of crisis in healthcare

Next generation genomic treatment costs

Mass migration

Climate change disasters

Geopolitical instability

Global recession

Post-COVID funding squeeze

Inflation and strikes

Workforce shortages

Staff burnout

Pre-pandemic undercurrents:

Aging and growing populations. The number of over 85's in the UK will double in the next 25 years.

Increased NCD burden. NCDs were the cause of 33.6% more emergency admissions in 2018 than 1998.

Workforce supply and productivity. Current shortfall of 154,000 is projected to increase to 571,000 by 2036/37.

Outdated technology. NHS clinicians lose over 4 hours per week due to inefficient IT systems (BMA).

Economic Inequality. A poor English girl, born in 2020, can expect to live 7.7 years less than a rich girl, and a boy 9.5 years less.

Growing mental health burden. 23% of patients wait over 12 weeks to start treatment; 78% seek help from emergency services.

Key Headlines

The Healthcare Sector has a significantly low level of digital maturity
While on 19% of UK public sector decision makers consider their digital transformation completely successful, this is still 2% higher than the wider public sector average of 17%

The Healthcare Sector is facing sever obstacles to success
Decision makers in the sector admit lack technology specific skills or knowledge (36%), technology strategy (57%), and training (57%) as main challenges

Organisations have experienced some impact from digital transformation success
Decision makers have seen a positive effect on customer journey mapping (50%) and improving agility in process (68%) from implementing digital practices

Base: 31 decision makers in the UK healthcare sector involved in digital transformation decisions.
Source: A commissioned study conducted by Forrester Consulting on behalf of KPMG, October 2023

Signal of change

Leading hospital in Israel

ONCOLOGY

Need to improve patient experiences and reduce administrative burden on staff

Digitally enabled workforce

Digital oncology nurse service

50%↑ Patient satisfaction

78%↑ Staff satisfaction
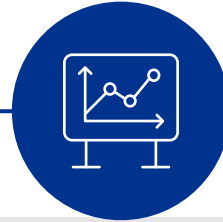
27%↓ Staff workloads

Signal of change

Digital portal offers access to appointment booking, lab results, imaging, and prescription ordering

Most care takes place in primary care and community settings – only 10% of adult outpatient appointments are in secondary settings

Shifting activity into the community

Family clinics provide primary, community, mental health and specialist services

AI is used to empower patients. The i-Deal health app encourages patients to confront their risks using EMR data.

Signal of change

Primary Care Centre in Stockholm faced a number of challenges

Waiting lists for GP appointments hit 4-6 weeks

Using data and analytics to solve challenges

Digital platform implemented, triaging patients via nurses

3-4 nurses treated 100+ patients per day

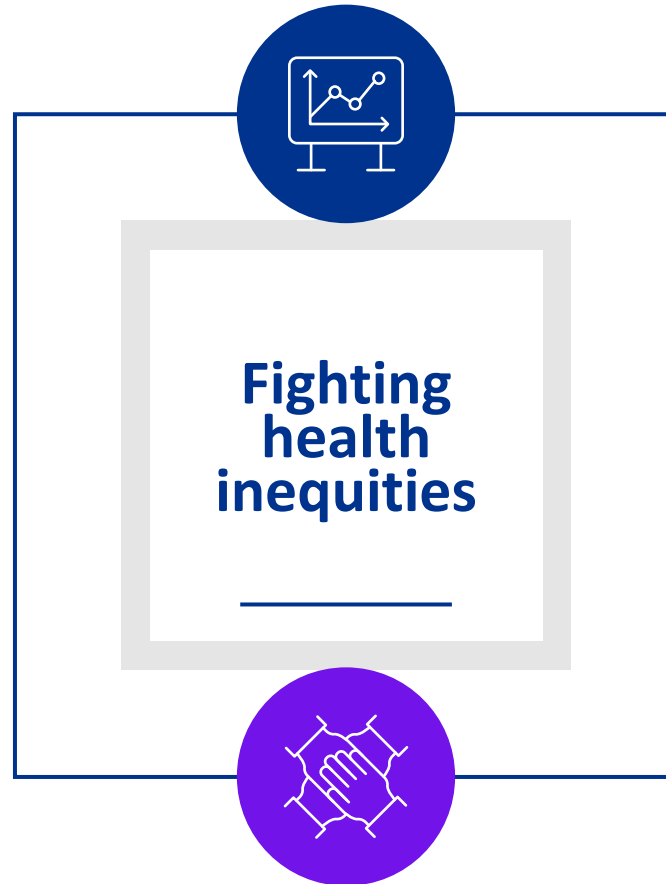**33%** more patients treated per clinical hour

Signal of change

Disproportionate COVID-19 impact on underserved communities in the United States

Morehouse School of Medicine and the National COVID-19 Resiliency Network

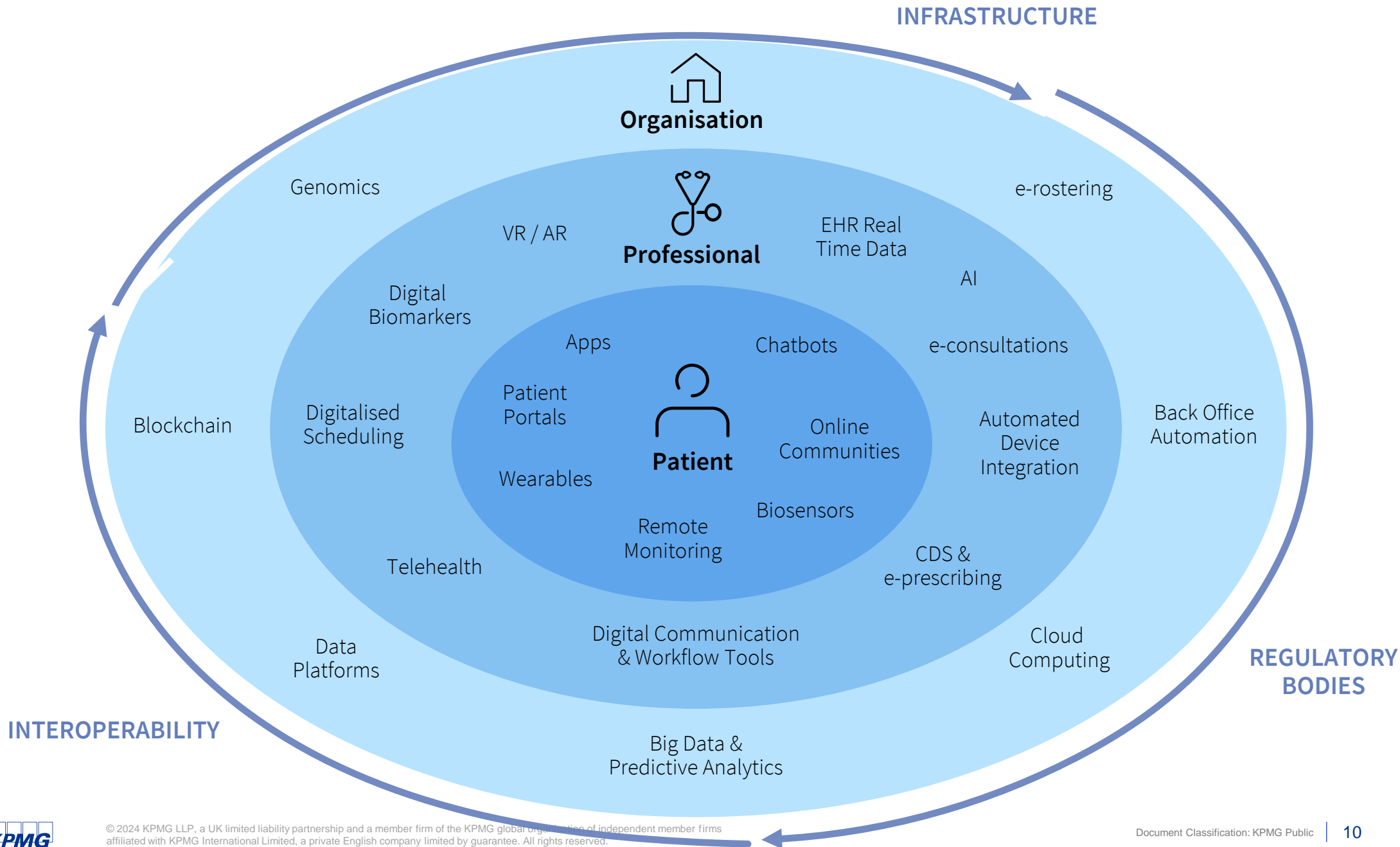**Fighting health inequities**

Harvesting insights from publicly available data sources

Partnering with community and other groups to provide culturally and linguistically appropriate interventions

INFRASTRUCTURE

Organisation

Genomics

e-rostering

VR / AR

Professional

EHR Real Time Data

AI

Digital Biomarkers

Apps

Chatbots

e-consultations

Blockchain

Digitalised Scheduling

Patient Portals

Online Communities

Automated Device Integration

Back Office Automation

Patient

Wearables

Biosensors

Remote Monitoring

CDS & e-prescribing

Telehealth

Data Platforms

Digital Communication & Workflow Tools

Cloud Computing

INTEROPERABILITY

Big Data & Predictive Analytics

REGULATORY BODIES

Connected Enterprise Transformation Method Overview

1. Frame
Make it clear

Organisational Readiness

Business alignment & governance

Digital maturity

Leadership & engagement

5. Deliver & Evolve
Make it stick

Targeted engagement

Iterative pilots

Measurable benefits

4. Develop
Make it happen

Clinically led

Benefit realisation strategy

Targeted training

2. Discover
Make it known

Workforce capacity & capabilities
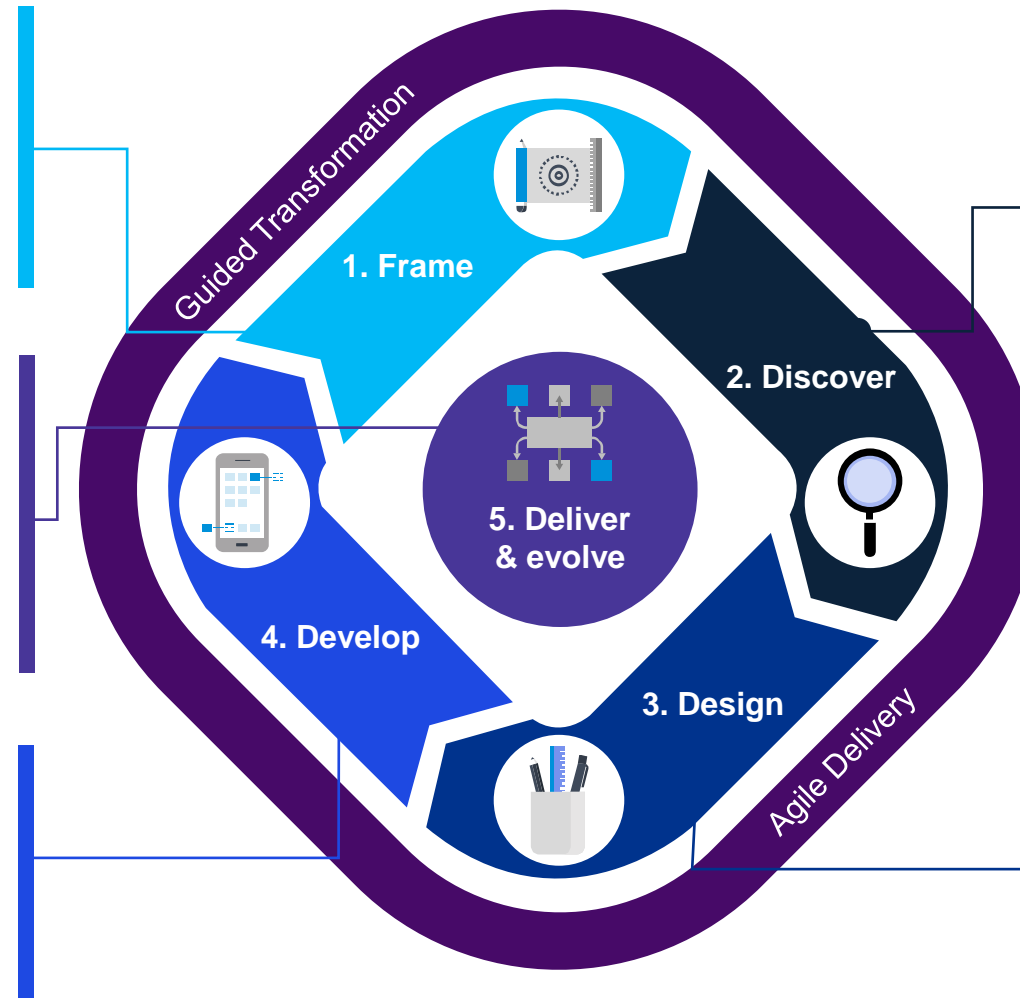
As-is-state

To-be-state

Technical assessment

3. Design
Make it real

Optimise patient & care giver experience

Process re-design

Define new operating model

Challenges

Challenge & Future

Incentives & ROI

Capabilities

Regulation

Technology Maturity

Digital
Transformation
Challenges

Interoperability

**Technology Led
vs. Clinically Led**

Ambitious Scope

**Cultural Change &
Stakeholder Engagement**
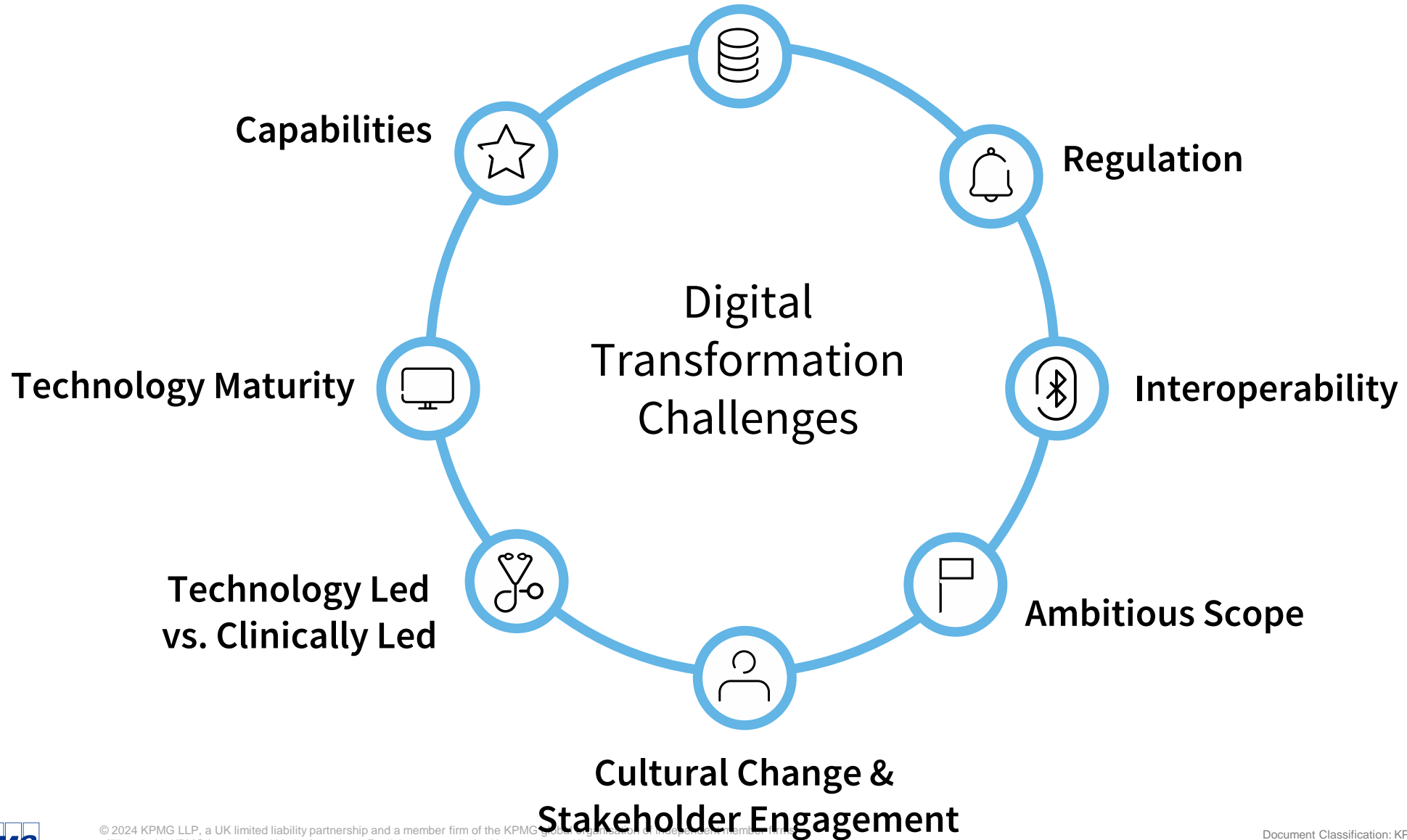
Future Focus

Future Trends

Technology and data

Web 3.0 will bring about the decentralisation of data on the internet, with power shifting to citizens

The metaverse will create new spaces for organisations to transact and engage

Widespread adoption of cognitive technologies (e.g., machine learning, natural language processing, speech recognition, and robotics) will facilitate seamless interactions between humans and machines

Artificial intelligence (AI) will continue to mature, liberating workers from routine tasks and enabling greater innovation

Increasingly complex digital twins will allow individuals and organisations to accurately simulate and predict the consequences of real-world decisions

Consumerism

Demand will increase for seamless, personalised and omnichannel experiences

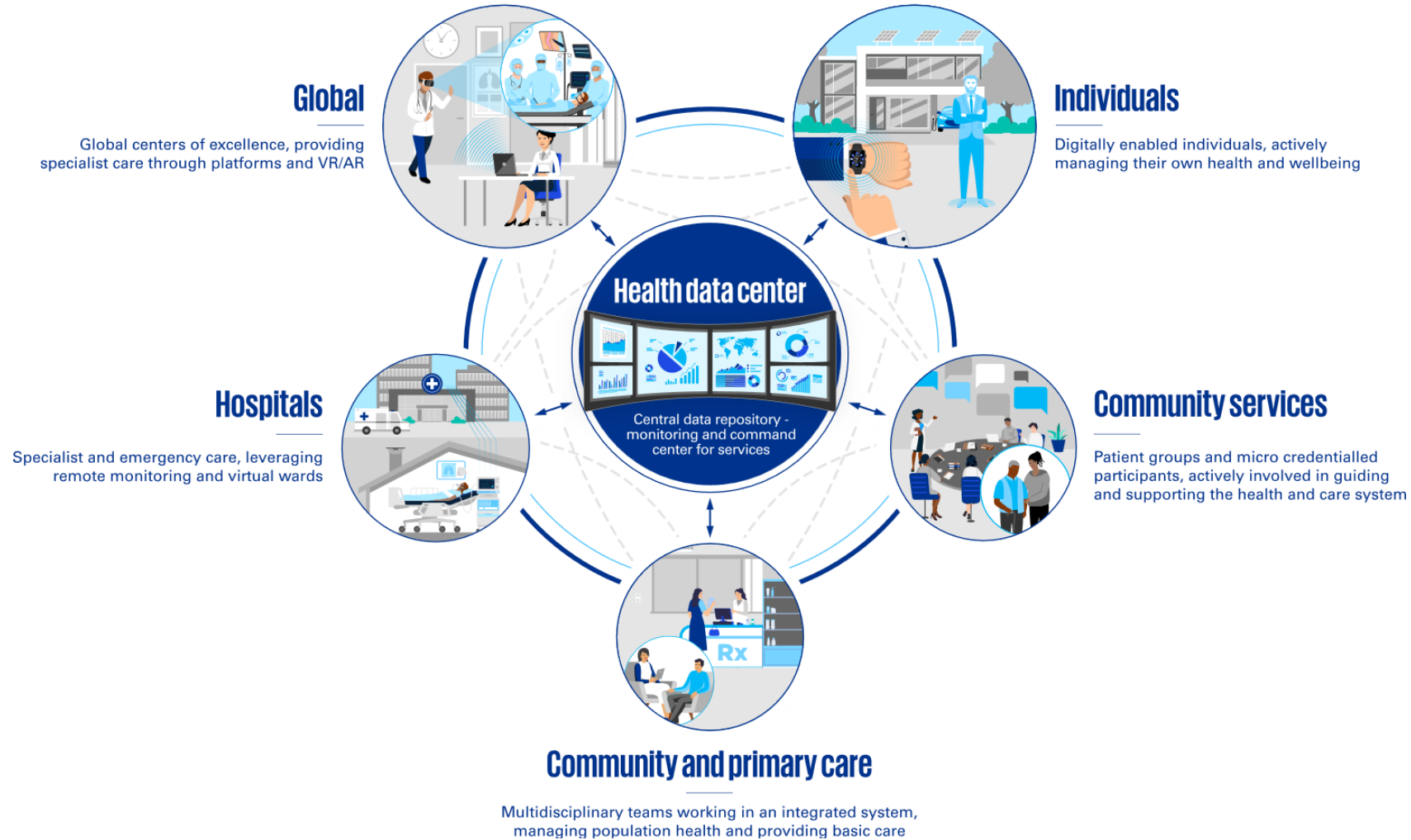Ecosystems will be consumer-centric rather than organisation-centered

Markets will converge and consolidate

Digital platform-based consumption will become widespread

What does an inclusive ecosystem look like?

Global

Global centers of excellence, providing specialist care through platforms and VR/AR

Individuals

Digitally enabled individuals, actively managing their own health and wellbeing

Hospitals

Specialist and emergency care, leveraging remote monitoring and virtual wards

Health data center

Central data repository - monitoring and command center for services

Community services

Patient groups and micro credentialled participants, actively involved in guiding and supporting the health and care system

Community and primary care

Multidisciplinary teams working in an integrated system, managing population health and providing basic care

Summary

1 Leadership Commitment and Vision Setting

2 User-Centric Design

3 Interoperability and Integration

4 Data Security and Privacy

5 Scalability and Flexibility

6 Collaboration and Partnership

7 Training and Change Management

8 Continuous Improvement and Innovation