CAN HEALTHCARE DATA BE USED IN PATIENT EDUCATION AND ENGAGEMENT?

Key Highlights

Fast evolving big data concept is challenging our traditional ways of taking care of health more than ever. Patient education is no exception! Although it has become one of the buzz themes as part of patient centricity, patient education has been under-played for some time. However, we observe that it might be evolving with richer data about us. Being rather data poor, Middle East and Africa are undertaking several initiatives to build an ecosystem that promotes capture and use of healthcare data.

As the data brings more transparency about the patient condition and history, it also enables customizing the information as per patient needs as well as promoting informed decision making. Big data concept is so broad that it will be good to evaluate different segments. One approach is segmenting the data by the source which could be helpful to identify opportunities for innovation i.e.:

1. Healthcare system generated data which is produced every time patient interacts with the healthcare system through EMR, EHR, etc.

2. Individual generated data which is created by personalized devices such as wearables and other remote patient monitoring devices.
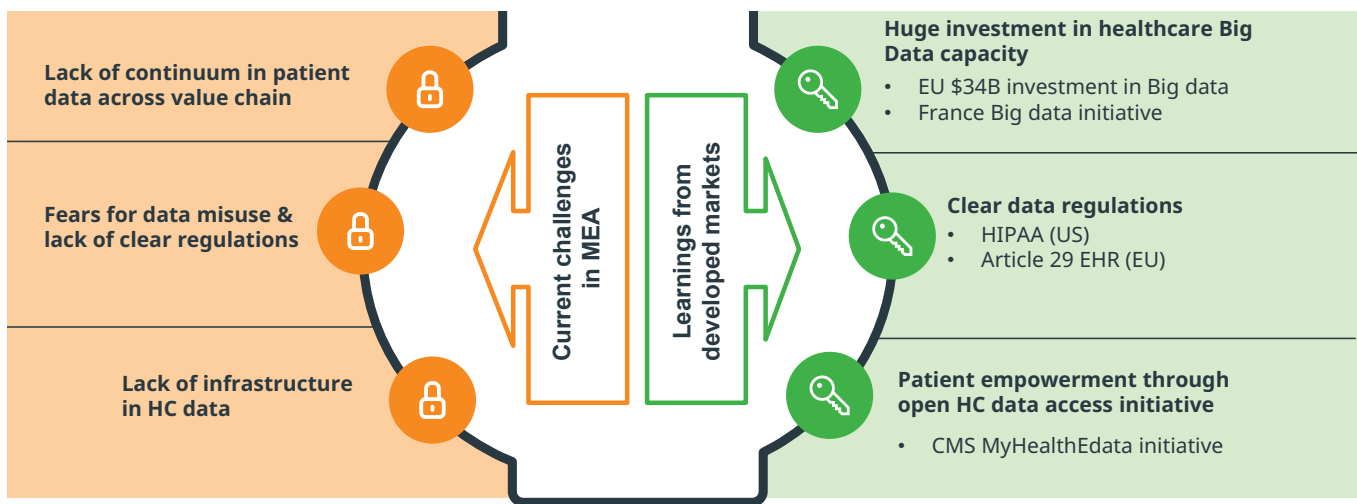
Healthcare data collection can happen inside and outside of healthcare ecosystem
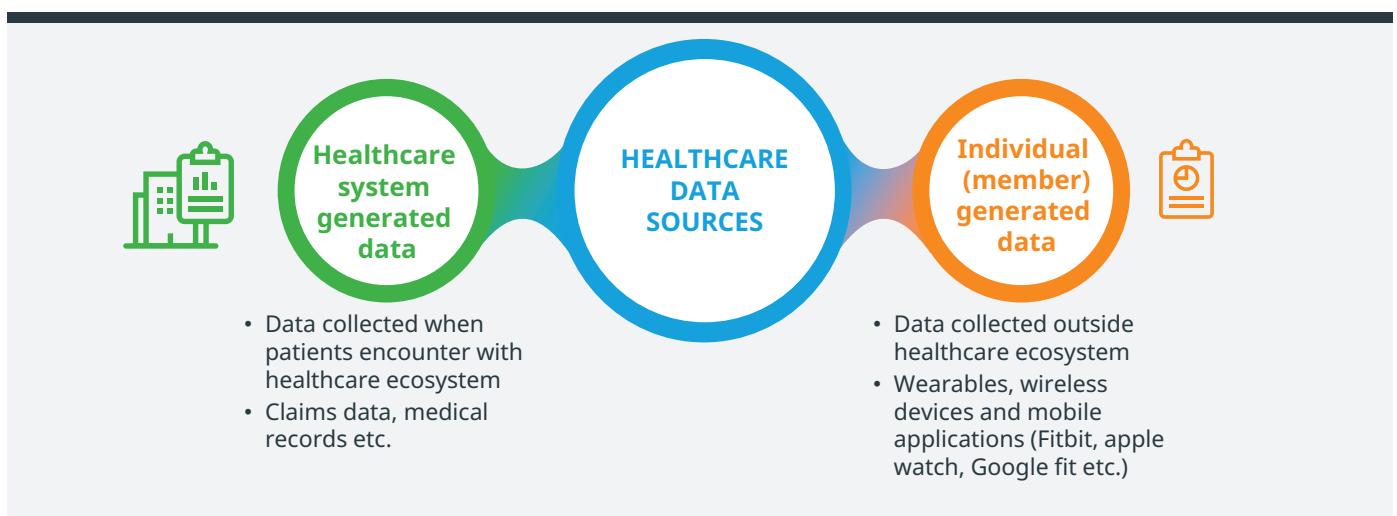
Whilst the Western World has made significant inroads in both data sources, Middle East and Africa is at the nascent stages. There are valid challenges leading to this situation such as lack of regulations, fear of mis-use, lack of infrastructure, etc. However, there are various reasons for us to believe that this situation will change. To start with, these were similar challenges in the developed countries and they were overcome in one way or another. On the other hand, we see strong commitment from governments towards developing digital infrastructure through numerous e-initiatives such as Maroc digital 2020, Smart City Cairo, KSA Vision 2030. The success of these initiatives will be very much dependent on the involvement of the private industry through Public-Private Partnership initiatives.

Challenges while driving data integration were overcome across developed markets which can help to draw learnings

Healthcare system generated data

Current challenges in MEA	Learnings from developed markets
Lack of continuum in patient data across value chain	**Huge investment in healthcare Big Data capacity** • EU $34B investment in Big data • France Big data initiative
Fears for data misuse & lack of clear regulations	**Clear data regulations** • HIPAA (US) • Article 29 EHR (EU)
Lack of infrastructure in HC data	**Patient empowerment through open HC data access initiative** • CMS MyHealthEdata initiative

Not too long, starting with the millennium, we have seen simple trackers turned into connected devices. More recently, we have seen a proliferation of various devices helping us track our health status much more broadly and create a wealth of data about us. The future trend is towards fully connected, AI supported settings… Growth speed is remarkable (more than 20% CAGR) for all major segments such as wearables, mHealth and tele health. However, what makes it more exciting is the possibilities to use this data for improved health conditions. At the end of the day, data doesn't mean much if we are not making sense of it and act on it. We are seeing great initiatives by the insurance companies, employers to encourage their employees and members to use wearable devices to take a control of their health. The incentives come in the shape of subsidizing trackers, gym memberships, providing with vouchers or even customizing policies and premiums.
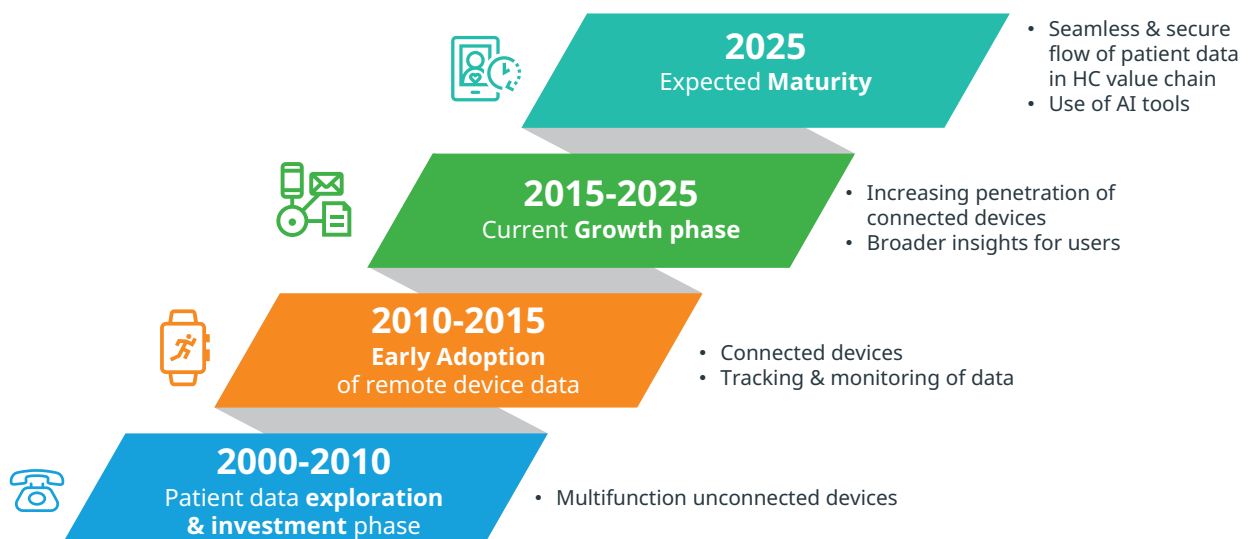
Wearable devices, mHealth, and telehealth markets are expected to grow with increasing adoption
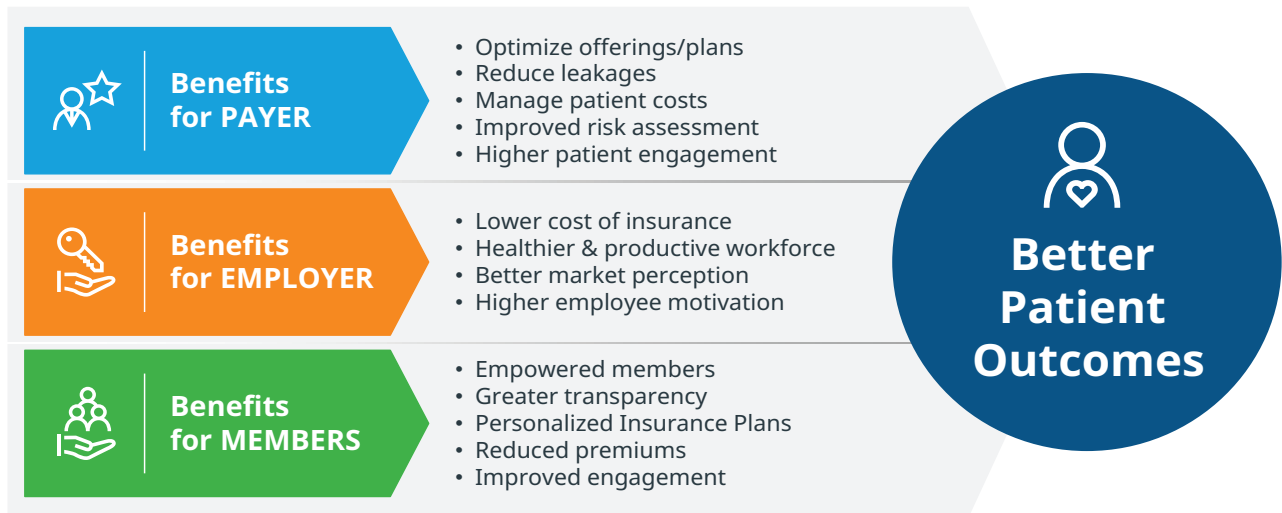
Individual (member) generated data

Wearable Devices	mHealth Technology	Tele Health
Market opportunity of **$34 billion**	**$23 billion** in market size	Market value of **$9.5 billion** by 2021
CAGR of **23%**	CAGR of **36%**	CAGR of **27%**
Non-invasive/highly intuitive nature, and rising awareness on fitness and healthy lifestyles adoption are key drivers	Apps, remote monitoring programs, and mobile audio/video communication are highly sought after	Rising geriatric, rural, and chronic disease populations are going to accelerate the growth

All in all, sharing data across the healthcare system would lead to tangible benefits for all stakeholders. while payers can optimize their plans, reduce leakages, better manage their budgets, employers can have happier, healthier and more engaged employees. One of the most important aspect is empowering individuals to take control of their condition, hence improving overall engagement, which is critical to manage chronic diseases like diabetes, hypertension etc. Understanding the differences between population segments helps customizing the action! For instance, our objective could be maintaining health status of the individual for which some incentives can be provided to keep a healthy lifestyle. However, for an acutely ill patient, instant support could be around booking appropriate doctor appointments and sharing customized content for their situation. Chronically ill patients could benefit most from the enriching data. On one hand, tele-health/ tele consultation make life easier for patients as well as usage of AI/predictive analytics based on ongoing remote monitoring.

Individual (member) generated data is evolving rapidly with increasing penetration and connectivity of devices

2025
Expected **Maturity**
- Seamless & secure flow of patient data in HC value chain
- Use of AI tools

2015-2025
Current **Growth phase**
- Increasing penetration of connected devices
- Broader insights for users

2010-2015
Early Adoption of remote device data
- Connected devices
- Tracking & monitoring of data

2000-2010
Patient data **exploration & investment** phase
- Multifunction unconnected devices

Sharing healthcare data across the ecosystem would lead to tangible benefits for ALL stakeholders

Benefits for PAYER
- Optimize offerings/plans
- Reduce leakages
- Manage patient costs
- Improved risk assessment
- Higher patient engagement

Benefits for EMPLOYER
- Lower cost of insurance
- Healthier & productive workforce
- Better market perception
- Higher employee motivation

Benefits for MEMBERS
- Empowered members
- Greater transparency
- Personalized Insurance Plans
- Reduced premiums
- Improved engagement

Better Patient Outcomes

It is obvious that we will see more examples of leveraging data for patient education and engagement purposes. The underlying success factor will be the openness and collaboration between stakeholders such as payers, providers and pharma companies. Companies who break the ice with others will likely gain a competitive edge and drive innovation. Would you like to lead or follow?

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How can IQVIA help?

Rethink your approach to patient engagement with custom-designed technology, data and methodologies. To know more about leveraging data towards engaging and educating patients, contact Hasan Kapar through LinkedIn or write to **IQVIA MEA Marketing**

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