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Life Sciences and Health Care Services

Innovative and practicable solutions to drive the future of Myanmar

Where are you in the future ecosystem?



Drone Delivery

Whether carrying first-aid equipment to an emergency or medicines prescribed by a telehealth doctor to a home, drones serve as the primary courier. Cheaper and faster logistics serve as a key tool for a decentralised health ecosystem.

Medical Cloud

Personal health care records, aggregated data from wearables, physician's notes—everything health related is accessible anytime and anywhere. Clinical care providers examine the data in real time and identify trends that illuminate patient health.

Epidemic Protection

Big data analytics accumulates disease information and correlates this with travel patterns to detect disease hotspots as they are burgeoning. Epidemic protection means predicting patterns and putting up safeguards before the disease takes root.



Business Models

Decentralised, personalised, and automated, health care provision of the future leverages on an interconnected ecosystem of services and devices to satisfy consumers. Monetising the health care businesses of the future requires innovative models.

Telehealth Centre

Decentralised care means traditional clinics need not exist. Doctors teleconference with the patient and view data sent to them from home-diagnostic equipment. Getting a consultation with a doctor will be like calling tech support for your body.

Robo-lab

Trawling through medical literature, forming research hypotheses and then executing the experiment – artificial intelligence guides the labs of the future. Machine learning automates the processes of pharmaceutical discovery and innovation.

Personalised Medicine/Genetics

Personalised medication for the patient-centred health care system of the future. Advances in genetics and drug manufacturing means that every treatment pathway is bespoke all the way down to the medicine itself.

Sensors

A network of sensors dispersed all around the city analyse pollutants, noise levels and human traffic. Primarily used for managing the governance of the city, such data also enriches the understanding of the health care landscape that individuals inhabit.

Robotic Assistance

Heavy lifting and menial tasks get erased from the job descriptions of hospital staff as robots take over. From helping to care for the elderly to drawing blood, robots allow health professionals to focus on being health professionals.

Wearables

A smart watch serves to monitor the entirety of someone's day. From food consumption to exercise levels – this is the stream of personalised data that drives health care and wellness in the



The Life Science and Health Care Platform of Services will help you to...

- Build the necessary trust, reputation and confidence with patients and stakeholders
- Stay abreast of best practices and evolving regulations
- Mitigate the impact of external factors in your strategy and planning
- Protect your activities and intellectual property
- Measure impacts of the organisation's activities
- Inspire solutions to overcome the organisation's challenges
- Develop actionable and measurable plans
- Assess the go-to-market strategy of new products and services
- Encourage multi-stakeholder involvement which includes public and private sector partnerships across the health care ecosystem.



Risk Powers Performance

Health care services are one of the fundamental sectors of society and the economy. With positive signs of accelerating access to market and increasing investment from the private sector, the health care sector has made a lot of progress in both public and private sector, for example the entrance of global multinational firms in hospital chains via public-private partnerships and pharmaceutical markets.

Many health care challenges remain. The changing demographics, shortage of medical and care professionals, and the underinvested infrastructure are major constraints in providing universal access to medical benefits. Organisations are struggling to improve their operational efficiency and effectiveness to achieve sustainable growth. In addition, the assimilation of Myanmar's economy with the rest of Southeast Asian economies will require the regulation of life sciences and health care sectors.

A different strategy is needed – one that enables us to do more with less and allows to stay responsive and proactive. The need to break immutable trade-off naturally lends itself to disruptive innovation, which brings new value propositions to age-old challenges. There has never been more focus on how Myanmar will identify and manage such challenges and risks.

Deloitte Risk Advisory powers performance, developing solutions for the life sciences and health care sector. We enable our clients to innovate, transform, and sustain the health and wellbeing of people and populations.

We do this by delivering innovative service offerings and a holistic approach, creating a measurable impact on patient journeys. We combine our deep industry expertise, as well as Myanmar knowledge, in order to protect and enhance your organisation with services tailored to your needs.

The Life Sciences and Health Care Platform of Services

	Services	Details
Governance	Governance	Address expectations or self-regulation through norms of governance related to board oversight responsibilities and stakeholders.
	Strategic Risk	Identify trends and disruptors that could impact shareholders and stakeholders as well as long-term objectives.
	Reputation & Brand Risk	Identify, monitor and respond to internal and external risks impacting trust and reputation (medical malpractice, drug safety,...).
	Sustainability	Develop, assure and report to the community on social, ethical, environmental and other non-financial impacts.
	Innovation	Identify all information and incentive-alignment risks stifling innovation to reinvent the "patient model".
	Project Risk Assurance	Assess, optimise and enforce project plans and personnel, as well as develop a forecast of likely technical, economic, and safety performance and critical success factors.
	Risk Management	Assess, optimise and enforce the organisation's structure, authority, and responsibility to manage risk appetite and exposure.
	Operations Resilience and Crisis Management	Ensure continuity and resilience to recover from crisis events. Activities include crisis simulations, crisis monitoring, implementation of crisis plans, and crisis communications in order to minimise impacts and disruption of activities.
	Internal Audit	Provide assurance to the committee and senior management, focusing on reviewing governance, effectiveness of projects, risk management and control processes, including a full range of outsourcing, co-sourcing, and technology and data analytics services.
	Extended Operations	Evaluate and manage third party risk related to outsourcing, licensing, alliances and other business partnerships.
	Fraud Prevention	Establish preventive controls, activities and education to reduce potential inappropriate activities such as bribery, misappropriations and misreporting to prevent financial losses and enhance reputation and trust.
Regulatory & Compliance	Strategy	Develop strategies to anticipate, and adapt to, regulatory change in Myanmar.
	Compliance Programmes	Design, implement and operate compliance programmes to preserve organisational value and create competitive advantage.
	Response	Respond to actual or prospective regulatory updates through implementation of efficient and effective regulatory change processes.
	Assessment Programmes	Align the organisation with a common risk language, define tolerance levels, and map relevant laws and regulations to applicable lines of operations.
	Compliance Technology	Identify and document critical technology platforms leveraged by compliance as well as evaluate technology platforms and leverage existing infrastructure.
	Training	Develop and conduct training plans for both internal and external audience across areas such as anti-bribery, data privacy and product knowledge. Continue to enhance training contents in accordance with constantly changing regulatory requirements and guidance.
	Compliance Analytics	Develop an oversight dashboard to monitor and track critical risk indicators across the organisation to provide compliance insights and manage compliance gaps.
Core Life Sciences and Health Care	Clinical Excellence	Benchmark existing clinical practices with leading standards and best practices to deliver reliable and high-quality care, enabling Quality Reporting.
	Health System Governance	Assure public and regulator's good system-wide governance, prevent avoidable harm to patients across primary, secondary and tertiary care systems.
	Therapeutic Area Assessment	Identify strategic therapeutic areas to align risks with medical benefits in order to balance the overall created value of healthcare services provided.
	Mobile/Digital Health Transformation	Identify solutions, assess transformation impact and develop a change roadmap to allow the organisation to adapt and adjust quickly to increasingly digital-based solutions.
	Health Data Analytics	Develop sustainable and adaptive analytics capabilities, making use of real-world data such as electronic patient medical records and drug performance data.
	Patient Referral Channel Management	Build new patient referral channels and manage a strong network throughout the care continuum in order to create broader collaborations within the health care ecosystem.
	Supply Chain Risk Management	Assess, optimise and manage risk exposure related to physical products flow disruption, quality failure, regulatory non-compliance, work safety and social responsibility failure.
	HCP/HCO Interaction Management	Provide solution platform to track and approve interactive events with HCP/HCOs including marketing events, grants and donations, promotional material and Transparency Reporting and insights of interaction activities.
	GxP compliance	Manage any GxP-related compliance requirements tailored for the pharmaceutical industry with focus on highly regulated areas such as GVP, GMP, GSP, GCP, GMA and IT Quality/CSV.

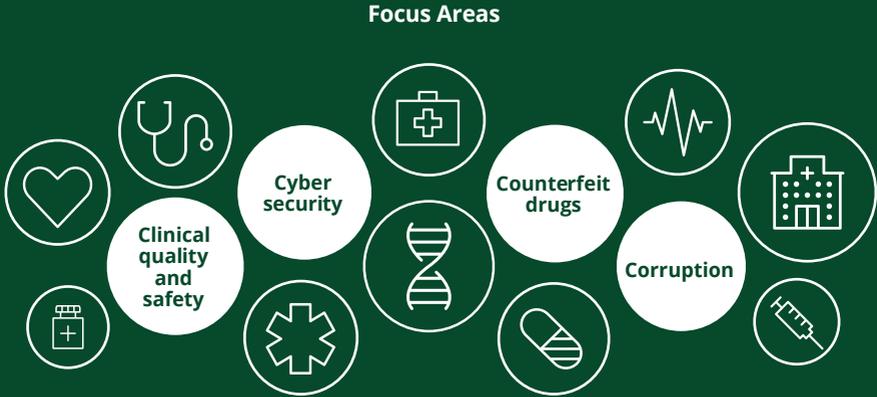
The Life Sciences and Health Care Platform of Services

	Services	Details
Finance	Capital, Liquidity & Treasury	Design, assess and implement processes, models, data and technology to report on capital, liquidity, and treasury exposure.
	Financial Reporting	Address accounting, finance and reporting processes and controls to improve integrity, transparency and efficiency through scoring.
Systems and Analytics	IT Audit	Provide assurance to the committee and senior management, focusing on IT systems review and control processes.
	IT Infrastructure Resiliency	Validate physical security-related risks across multiple risk areas by assessing the existing IT infrastructure controls to determine extent of remediation for IT infrastructure security.
	Technology & Data Protection	Manage and protect the information lifecycle of the organisation in an effective manner via implementing enterprise-wide technologies and a data management framework.
	Business Intelligence	Assess vast amounts of useful information and data generated by the IT system to enable services in a transparent, accountable and efficient manner in order to execute the organisation's business strategy.
Cyber	Cyber Strategy	Guide investment and ongoing management of cyber risk programmes including risk assessments, threat awareness and implementation of GRC solutions for pharmaceuticals, medical device and healthcare providers.
	Cyber Security	Establish risk-focused cyber controls, balancing the need to reduce risk and safeguarding patients and organisational interests. This includes safeguarding the cyber security of connected medical devices for patient safety.
	Cyber Vigilance	Leverage our deep experience with analytics and correlation technologies to monitor solutions against attacks on local networks.
	Cyber Resilience	Prepare to handle critical cyber incidents, return to normal operations, and remediate.
Human Capital	Performance	Align interests of physicians, unify operational and clinical leadership, and in turn improve the overall performance of people.
	Learning Solutions	Build a solid framework for achieving an effective, efficient, and well-aligned learning organisation capable of driving organisational results.
	Talent Assessments	Assess future talent strategy, including talent diagnostics and talent roadmap for sequencing and implementing talent solutions.
	Compensation	Implement and assess performance and management of compensation, benefits, and other rewards programmes.

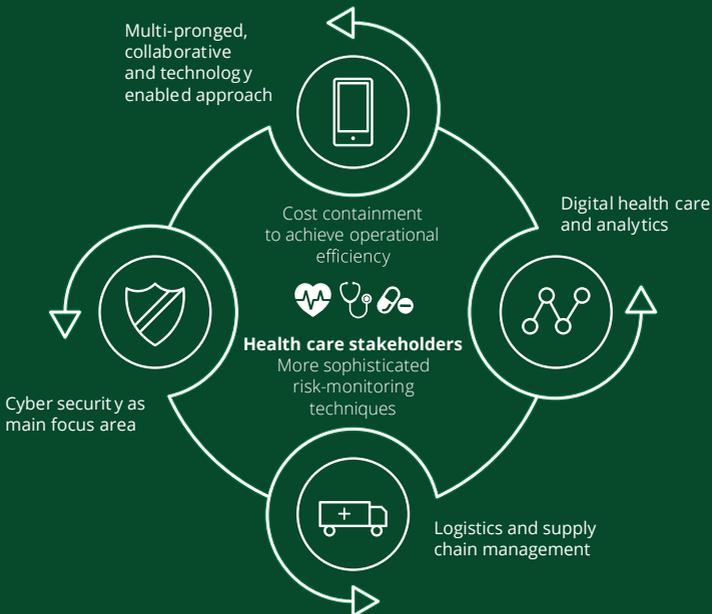


Stakeholder's Focus Areas

Organisations of all sizes will need to continue navigating and complying with a highly complex, changing set of global, regional, country, and sector-specific laws and directives.



Stakeholder's Consideration



Our Top 10 Strategic Risks on the Health Care ecosystem

External environment shaping predictions

- 1 **Health Consumers**
Informed and demanding patients are now partners in their own health care
- 2 **Health care delivery systems**
The era of digitised medicine - new business models drive new ideas
- 3 **Wearable and mHealth applications**
Measuring quality of life not just clinical indicators
- 4 **Big Data in 2020**
Health data is pervasive - requiring new tools and provider models
- 5 **Regulatory compliance and patient safety**
Regulations reflect the convergence of technology and science

Strategic Risks

- Allowing too much consumer autonomy potentially undermines professionalism of the medical fraternity (becomes too much of a service industry)
- Investment into digital/technology might not bring about significantly better health outcomes as anticipated
- Accuracy and authenticity of readings from wearable devices potentially questionable and the importance to determining identity becomes paramount. Potential risk of abuse by irresponsible parties
- Data privacy and security issues become even more significant and ownership claims on personal data versus organisational data become more complex
- Regulators having to fine tune the balance between protective (health care quality and patient safety safeguards) versus protectionism (political and nationalistic agenda) stance to allow for real world progress in health care

Internal Industry performance shaping predictions

- 1 **Research and development**
The networked laboratory - partnerships and big data amidst new scrutiny
- 2 **The pharmaceutical commercial model**
Local is important but with a shift from volume to value
- 3 **Measurable and mHealth applications**
Single, global organisation responsible for insight enablement
- 4 **New business models in emerging markets**
Health data is pervasive - requiring new tools and provider models
- 5 **Impact of behaviors on corporate reputation**
A new dawn of trust

Strategic Risks

- Complex arrangement of IP ownership structure potentially give rise to legal tussles between members of the partnership
- Failure to transition from volume to value business model will negatively impact business viability in unforgiving and highly competitive market environment
- Inevitably requires significant investment (money/-time/manpower) to reconfigure/setup centralised resource
- Potential unreliability of data in relation to emerging market sources
- Mismanagement of reputation risk issues can have negative long-term effects on brand value

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