PUN HLAING SILOAM HOSPITALS










MYANMAR HEALTHCARE LANDSCAPE

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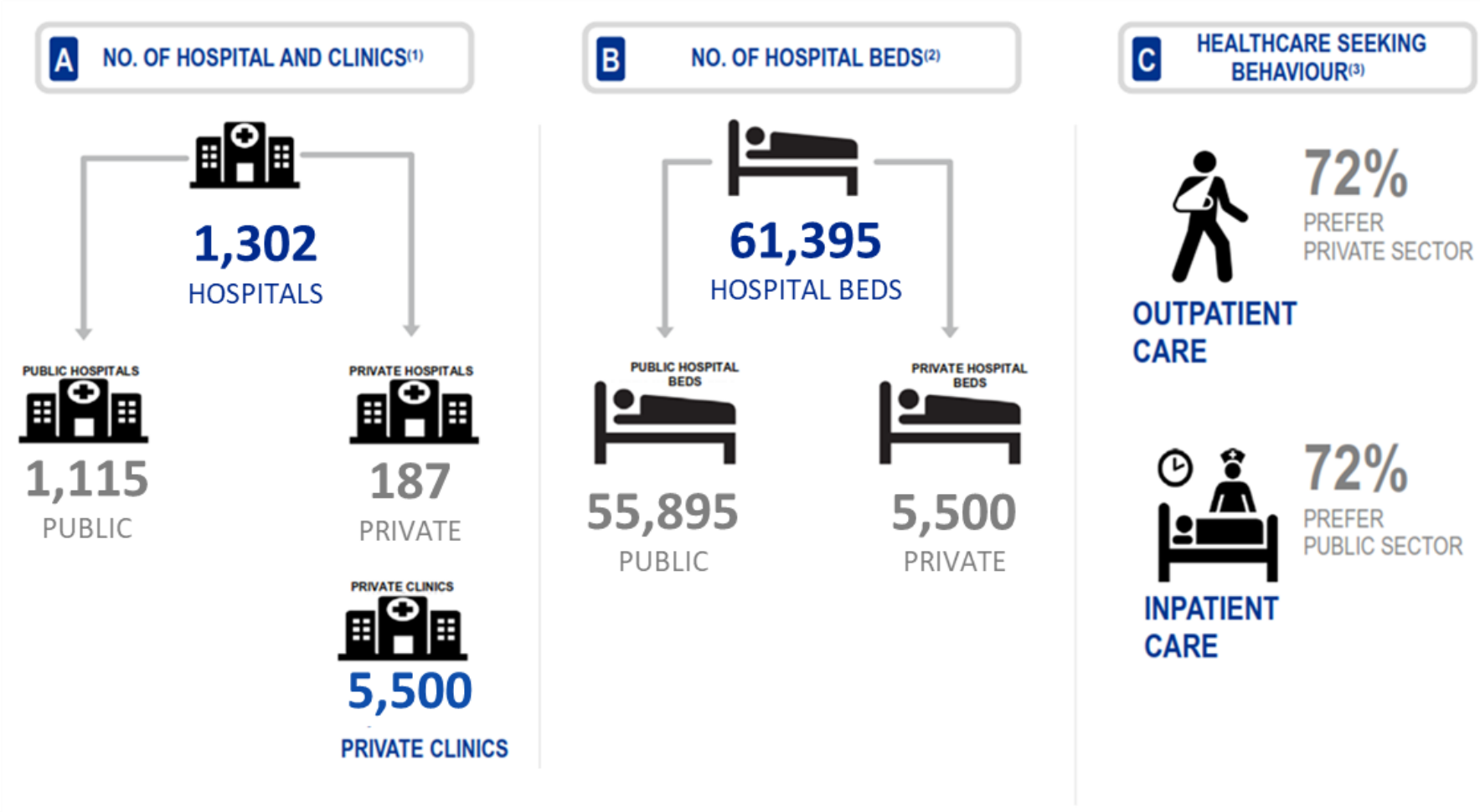
May 2019

MYANMAR HEALTHCARE LANDSCAPE CURRENT VS FORECAST

FY 2019-20	FY 2028-29
Population 55 million	Population 60 million
GDP Approx. $ 72 Billion	GDP Approx. $ 150 Billion
Health Expenditure, total (% of GDP) 3% $ 2.1 Billion $ 39/ capita	Health Expenditure, total (% of GDP) 5% $ 7.5 Billion $ 125/ capita
Private sector spend 30% $ 630 Million	Private sector spend 30% $ 2.25 Billion

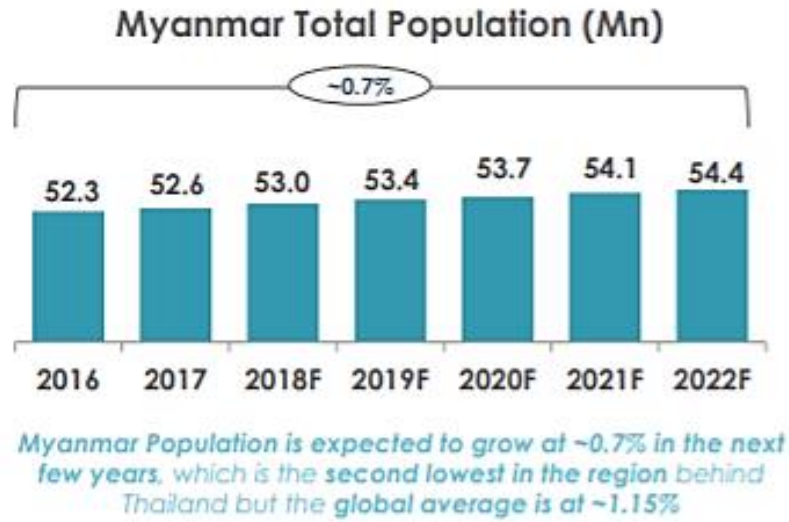
MYANMAR HEALTHCARE INFRASTRUCTURE

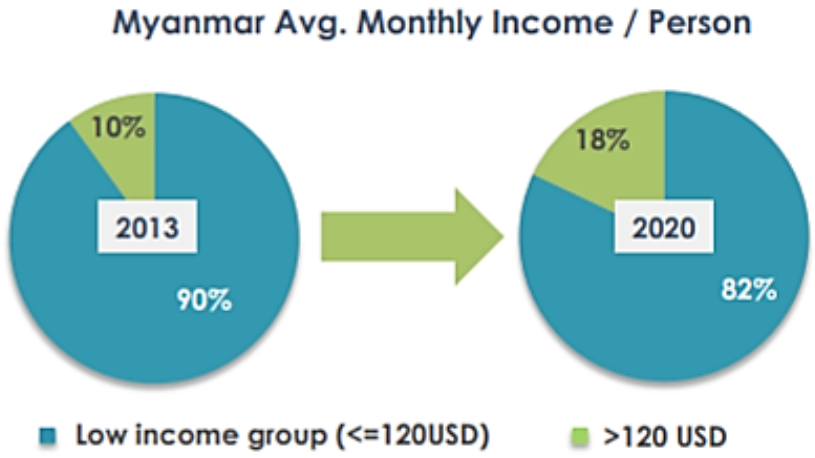


Reference: KPMG Report, Project ZIWAKA

GROWING POPULATION, URBANIZATION AND ECONOMY

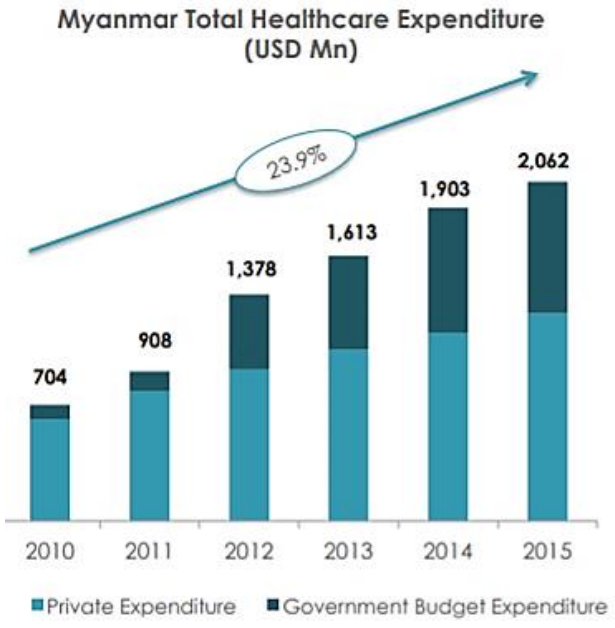
Country	Population 2016 (Mn)	Current GDP 2016 (USD Bn)	Inflation Growth (2016-2022)	GDP Growth (2016-2022)
Indonesia	258.7	932.5	4.1%	5.3%
Philippines	104.2	304.7	2.9%	6.9%
Vietnam	92.6	201.3	4.7%	6.3%
Thailand	69.0	407.0	1.8%	3.1%
Myanmar	**52.3**	**66.3**	**6.5%**	**7.4%**
Malaysia	31.7	296.6	4.7%	2.8%
Cambodia	15.8	19.4	3.1%	6.7%
Laos	7.2	13.8	2.8%	6.9%
Singapore	5.6	297.0	1.4%	2.5%

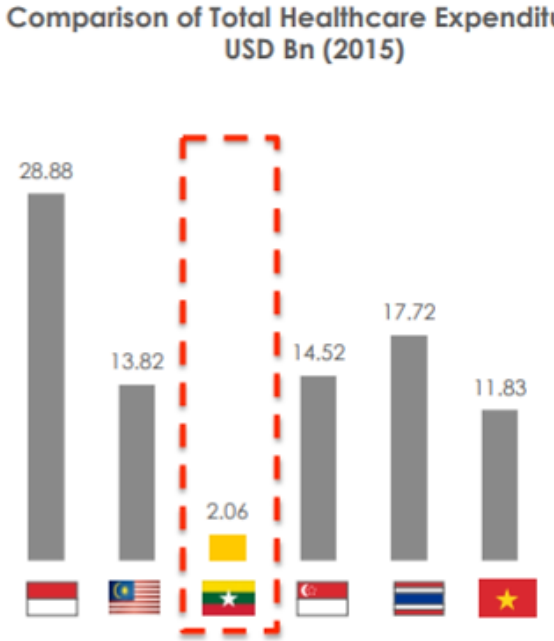


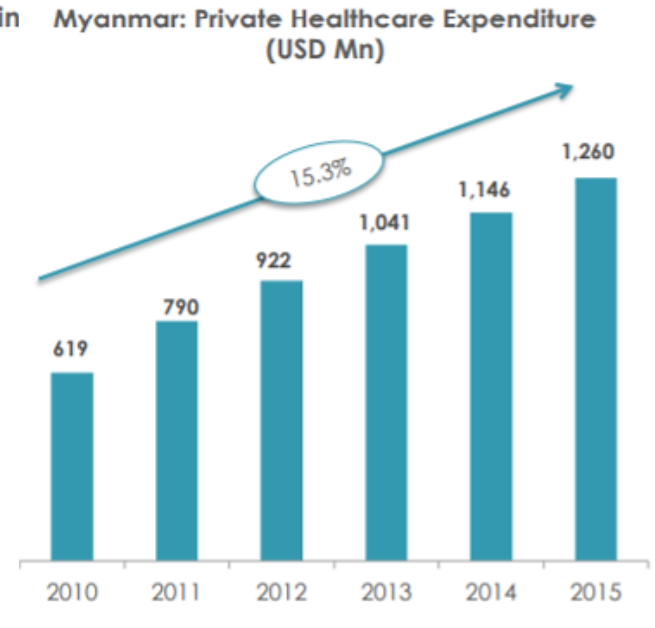


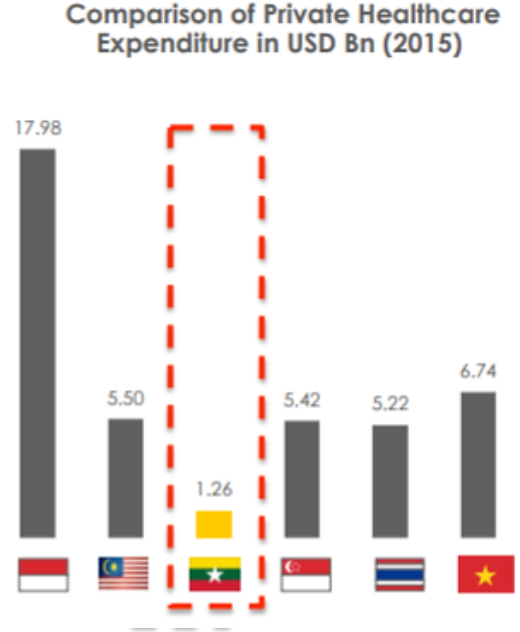
Reference: Trends and Opportunities in Myanmar Healthcare Sector by Solidiance

LEADING TO IMPROVEMENT IN HEALTHCARE EXPENDITURE







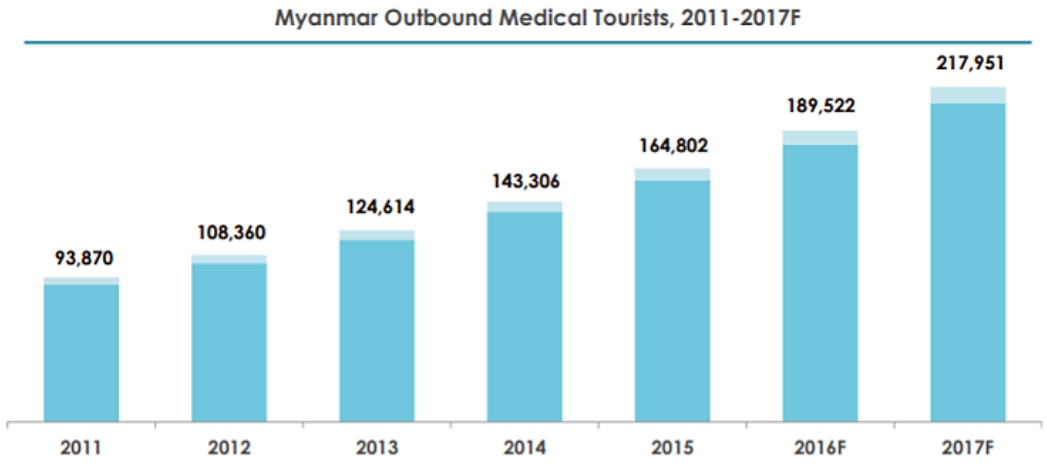


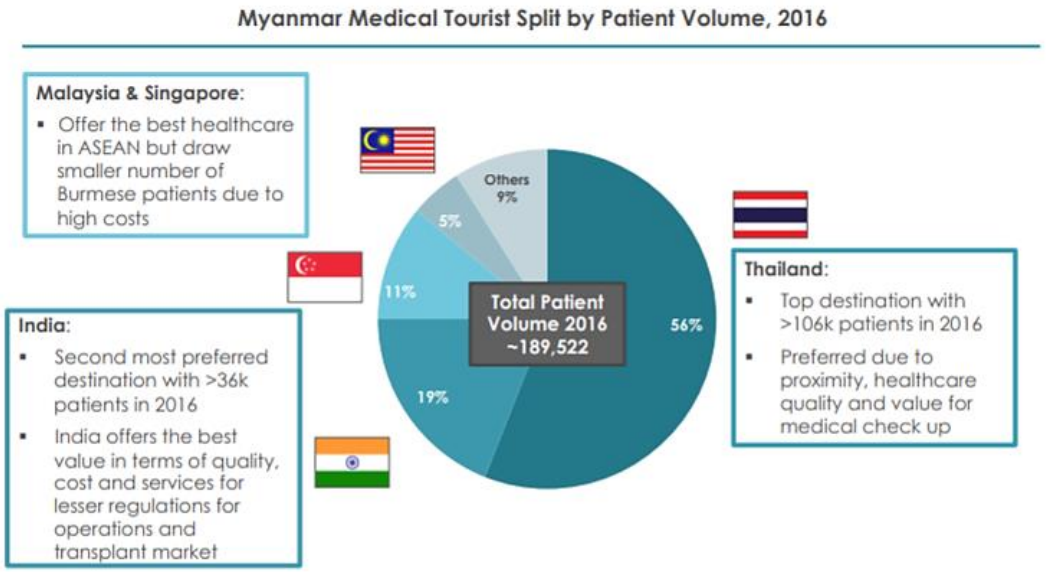
- Total healthcare expenditure is increasing with a growth rate of ~24% primarily driven by the higher government budget allocation in Myanmar.
- Despite its high growth rate, total healthcare expenditure is at USD ~2.06 Bn in 2015 which is relatively behind compared to other ASEAN countries.

- Increasing public awareness and growing private facilities will be expected to drive the private healthcare expenditure but limited public spending power is still the key barrier

Reference: Trends and Opportunities in Myanmar Healthcare Sector by Solidiance

OPPORTUNITY TO REVERSE OUTBOUND MEDICAL TOURISM





Reference: Trends and Opportunities in Myanmar Healthcare Sector by Solidiance

- ***Rapid economic development of Myanmar precedes the development of healthcare infrastructure*** resulting in more affluent patients to seek medical treatment overseas (ie. Bangkok, Singapore and India).
- ***Everyday, 500 Burmese patients are going abroad to seek healthcare*** because they believe they will receive better care and quality outside Myanmar.
- To capture demand from these patients who can afford better healthcare, private and government hospitals in Myanmar ***need to upgrade infrastructure, care delivery system and quality of care.***
- ***PHSH's service offering based on Accreditation, Affiliation, Track Record and State-of-the-Art value proposition*** is in the best position to ***reverse the trend*** and offer equitable access to quality healthcare in Myanmar
  - Near Term – target to reverse outbound medical travel
  - Mid Term – attract inbound tourism and play an important role in Indonesia's evolution into the next medical hub

STEEPLE ANALYSIS

S	T	E	E	P	L	E
SOCIAL	TECHNOLOGICAL	ECONOMIC	ENVIRONMENTAL	POLITICAL	LEGAL	ETHICAL
						
Demography Epidemiology Geography Socioeconomic Urbanization Literacy	Evidence-based Care Predictive & Personalized Robotic Home-based Device-based Telemedicine Health Apps/ mobile Apps	GDP Per Capita Income Disposable Income Insurance Demand Side Supply Side	Micro Macro Environmental Policy Waste Management (Chemical/ Biological)	Rules and Regulations Polices Laws Political Stability Foreign Trade	Taxing License Legal Compliance Employment Law Consumer Protection	Bribery Intellectual Property Reputation Business Ethics Confidentiality

SOCIAL FACTORS

Life expectancy:

Men	:	63.9 years
Women	:	69.9 years
Highest	:	Mon State (71.7 years) and Yangon (71.2 years)
Lowest	:	Magwe (60.6 years) and Ayeyarwady regions (61.0 years)

Fertility rate:

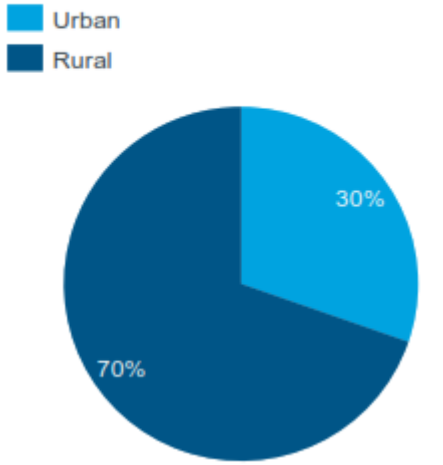
Myanmar women have an average of **2.3 children**

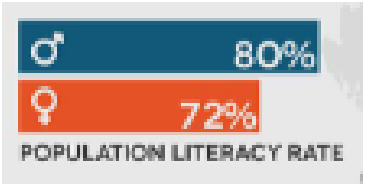
» down from 4.7 children in 1983

Urban areas: **1.8 children**

Rural areas: **2.5 children**

Myanmar rural population 2017 (% of total)

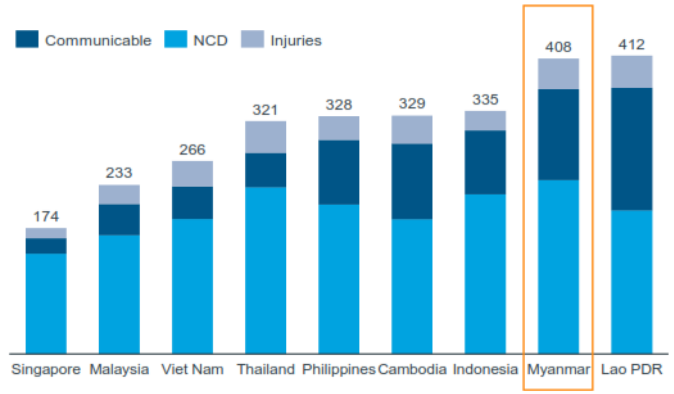




Top 10 diseases Myanmar, number of deaths 2017

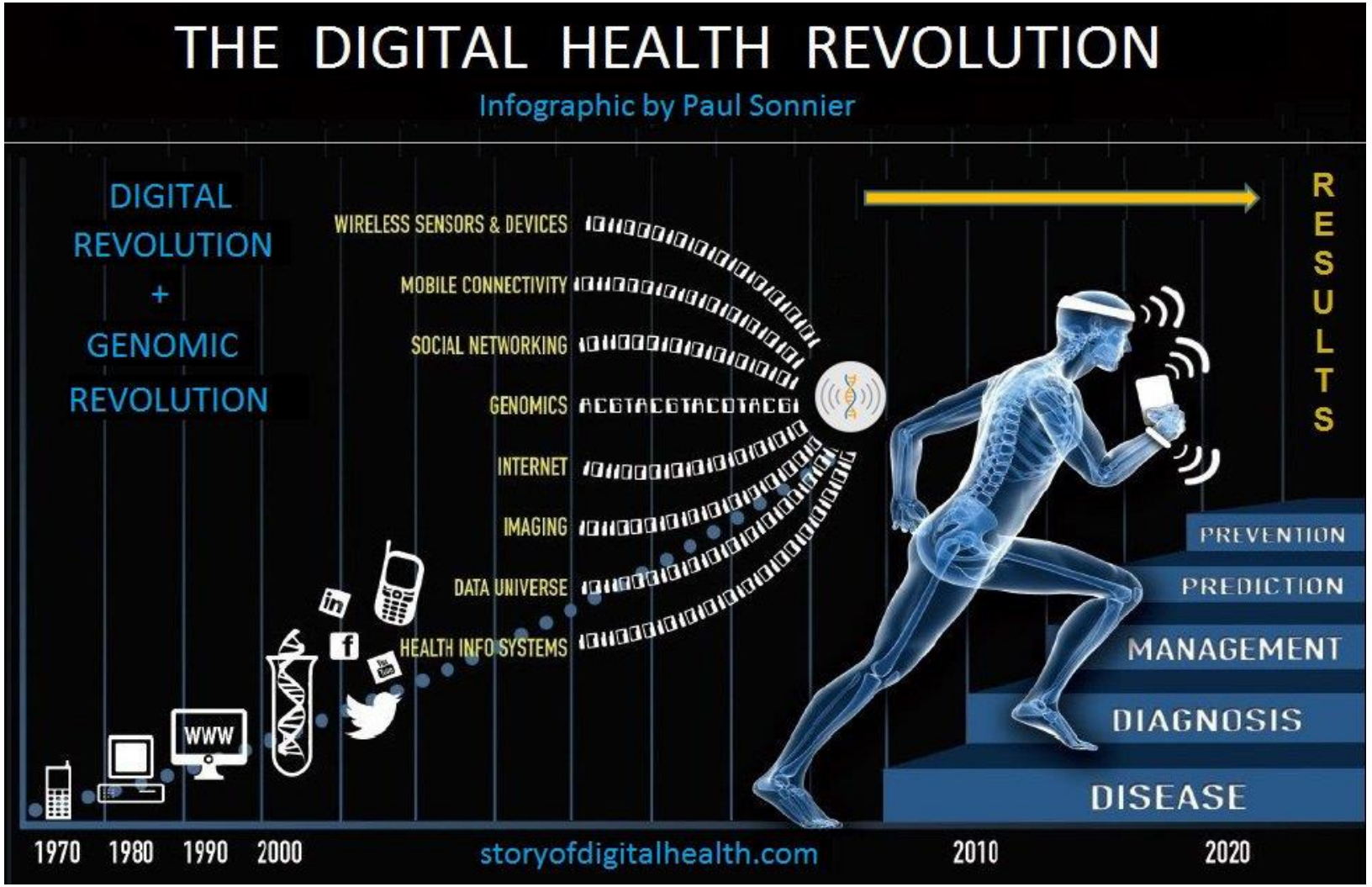
2007 Ranking	2017 Ranking	Disease	Growth 2007-2017	# of deaths 2017
1	1	COPD	16%	38,842
2	2	Stroke	0%	35,531
3	3	Ischemic heart disease	-1%	31,883
4	4	Diabetes	21%	27,217
5	5	Cirrhosis/other chronic liver diseases	7%	23,171
6	6	Lower respiratory infections	-31%	22,582
7	7	Asthma	-19%	14,759
8	8	Alzheimer's disease/other dementias	36%	14,445
9	9	Tuberculosis	-49%	13,540
15	10	Neonatal disorders	-40%	13,244

DALYs per 1000 population 2016



Reference: Myanmar Times, Myanmar: A Country of Difference, Institute for Health Metrics and Evaluation, WHO, Secondary Research, IQVIA

TECHNOLOGICAL FACTORS



ECONOMIC FACTORS

Fast growing and booming Myanmar economy

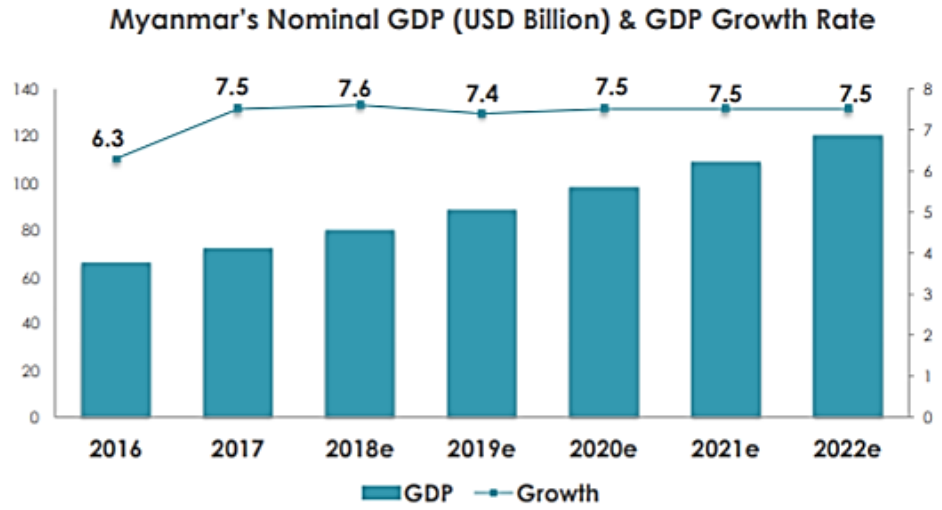
- Myanmar is the second largest country in SEA in terms of land area and the fifth largest country for population size, with significant untapped potential.
- Myanmar's economy is expected to grow at ~7.4% in the next 5 years, driven by economic and political reforms since 2011.
- Total healthcare expenditure is increasing at a growth rate of ~24%, primarily driven by the higher government budget allocation in Myanmar.
- Despite its high growth rate, total healthcare expenditure is estimated at USD ~2.6 Bn in 2017 which is relatively behind compared to other ASEAN countries.

66.3 BN USD
2016 GDP (at current prices – est.)

1,269 USD
2016 GDP per capita (est.)

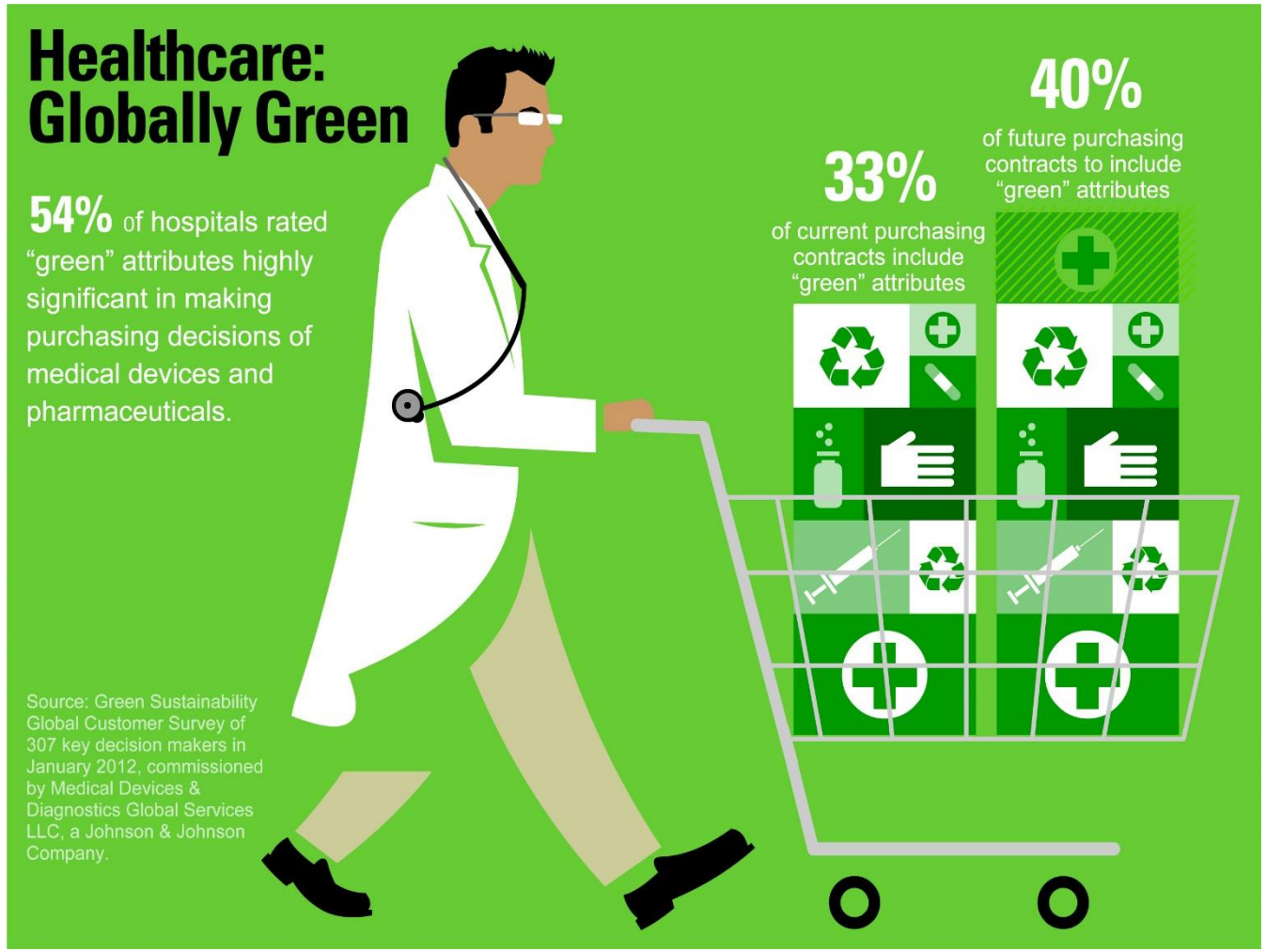
7.0 %
2016 Inflation Rate (est.)

52.3 MN
2016 Population (est.)



Reference: Trends and Opportunities in Myanmar Healthcare Sector by Solidiance

ENVIRONMENTAL FACTORS



Waste Management

Energy Saving

Flimless Radiology

Ecofriendly Chiller

POLITICAL FACTORS

Universal Health Coverage

Private Public Partnership

ETHICAL AND LEGAL FACTORS

AUTONOMY

Acknowledge people's right to make choices for themselves based on their own values and beliefs

BENEFICENCE

One ought to prevent and remove evil or harm; One ought to do and promote good (Beauchamp & Childress, 2009, p. 151).

NONMALEFICENCE

"One ought not to inflict evil or harm," where harm is understood as "thwarting, defeating, or setting back some party's interests"

JUSTICE

Treat others equally and fairly.

PHSH: FIRST MOVER ADVANTAGE IN A HIGHLY UNDERSERVED MARKET

Dramatic undersupply of hospital beds and healthcare professionals

0.9 (4.7)
HOSPITAL BEDS
per 1000 Population

0.6 (2.5)
DOCTORS
per 1000 Population

0.9 (9)
NURSES
per 1000 Population

Myanmar

OECD Average

PHSH has the First Mover Advantage to fill the gap

- PHSH is Myanmar's most established private hospital group with proven ability to rapidly rollout new hospitals as well as acquire and remodel existing hospitals.
- With 3 existing operating hospitals, PHSH is the only group with the momentum and concrete rollout plan to address the rising demand for healthcare services.
- The only hospital in Myanmar with full-time specialists in a multidisciplinary team-based model.
- The only American heart association certified BLS/ACLS training center.

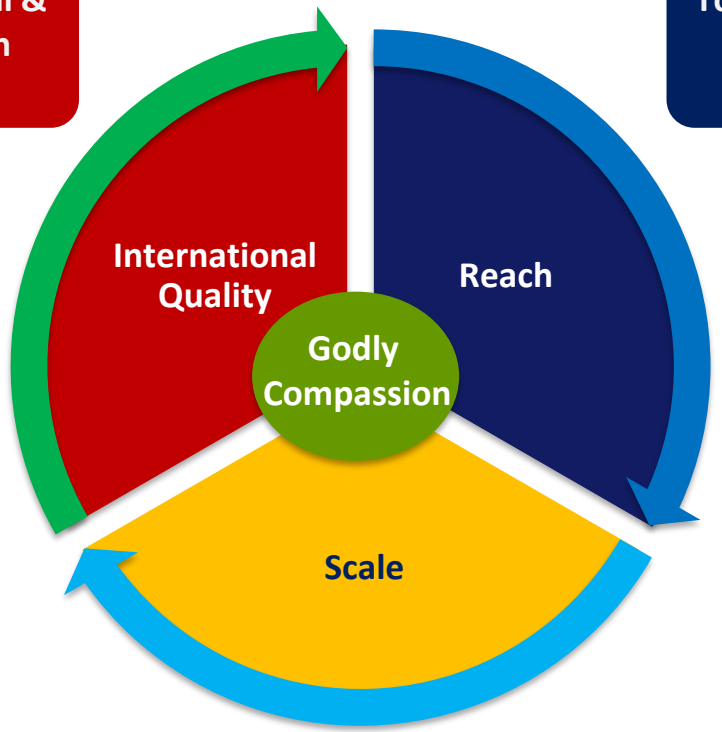
Increasing aging population → **High disease prevalence** → **Growing demand for healthcare services and medical devices** → **Early detection of diseases** → **Regular check ups**

Reference: World Bank, WHO, Myanmar Statistical Year Book2016, Health at a Glance: Asia Pacific 2018, Secondary Research, IQVIA analysis

OUR VISION

Only JCI Accredited Hospital & First EDGE Certification in Myanmar

To be a National Network with 10 Hospitals/Clinics across Myanmar by 2028/29



Affordable, Accessible and Equitable Healthcare
to All Socio-Economic Segments

OUR FOUR PILLAR OPERATIONAL MODEL

1 Emergency	2 Technology	3 Tiered Pricing	4 Doctors
Excellence in Emergency Services	State-of-the-Art Medical Equipment and Systems	Five-Tiered Pricing for Hospital Beds	Doctor Partnership and Career Development Program

4 Pillar Foundation

OUR CLINICAL SERVICE DEPARTMENTS

CLINICAL DEPARTMENTS

LINE OF BUSINESS (LOB)

LINE OF SERVICE (LOS)

- Anesthesiology
- Cardiology
- Dentistry
- Endocrinology
- Gastroenterology
- General Surgery
- Internal Medicine
- Pulmonology
- Nephrology
- Neuroscience
- Obstetric and Gynecology
- Oncology
- Opthalmology
- Orthopedics
- Otolaryngology
- Pediatrics
- Plastic, Aesthetic and Reconstructive Surgery
- Rehabilitation
- Urology

OUR CLINICAL SERVICE DEPARTMENTS

CLINICAL DEPARTMENTS

LINE OF BUSINESS (LOB)

LINE OF SERVICE (LOS)

Out-patient Department

In-patient Department

Emergency Department

Medical Check-up Unit

OUR CLINICAL SERVICE DEPARTMENTS

CLINICAL DEPARTMENTS

LINE OF BUSINESS (LOB)

LINE OF SERVICE (LOS)

Imaging

Laboratory

Pharmacy

Intensive Care Unit

Haemodialysis

Rehabilitation

Cath Lab

Operation Theatre

DIGITAL STRATEGY

Digital

- EMR, CDSS, E-prescription
- E-learning
- Patient Portal / Mobile App
- Mobile Working
- Digitally Connected Medical Devices
- Home Based Care/ Telemedicine

Automation

- Standardized Workflow
- Clinical Data, Patient Outcome Registries
- Real Time Patient Flow Management (OPD,IPD,ED)
- Predictive Analytic / Risk Protection
- Barcoded Supply Chain Process, Closed Loop Medication

Human Behavior

- E-Rostering
- Digital Operability at point of care
- Access to Decision Support Tools and Shared Care Plans
- Home Care/ IOMT
- HIMSS Goal

THE CHANGING ROLE OF PATIENTS

Past	Present	Future
• Passive recipient of information and care; responds to 'doctor's orders'	• Empowered; active participant in treatment decisions	• Primary decision-maker • Active partner with physicians and care teams • Potentially no physicians
• Limited access to medical information	• Easy access to medical information (via web, social media) • Researches symptoms prior to doctor visit	• Proactive medical information (re: potential illness) delivered automatically via AI or virtual reality
• No access to digital health tools	• Uses multiple digital health tools (mobile and web-based) • Orders certain tests (including genetic tests) online	• Orders and analyses tests using smartphone • Self-care via prevention and treatment (including more home screening, and treatment via nanobots in bloodstream)

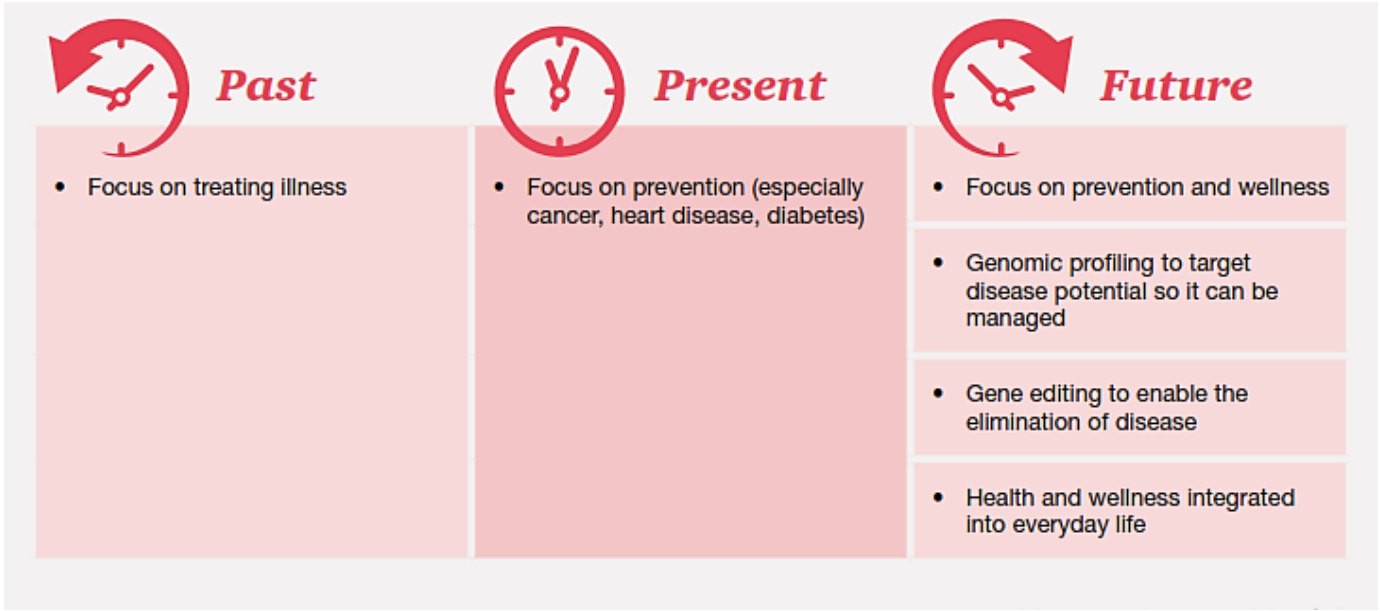
Reference: New Health: A Vision for Sustainability by PWC

THE CHANGING ROLE OF WORKFORCE

Past	Present	Future
• Physicians, nurses, other medical professionals	• Professionals and non-professionals (caregivers, social workers, etc.) • Robotic-assisted caregivers	• Self, assisted by AI and possibly medical professionals
• Many specialist doctors	• Too few physicians in emerging markets • Too few general practitioners (GPs), too many specialists in developed markets	• Fewer specialists, more primary care doctors • Robots replace specialists for some procedures (e.g., robotic surgeons)
• Individual care providers	• Care teams	• Integrated care teams led by primary care doctors • Robots incorporated into care teams
• Medical expertise is prioritised	• Technology-assisted clinicians	• Technology expertise and management skills are prioritised
• Few unskilled workers	• More unskilled workers, assisted by technology	• Skilled and unskilled workforce assisted by AI and robotics

Reference: New Health: A Vision for Sustainability by PWC

THE EVOLUTION OF WELLNESS AND PREVENTION



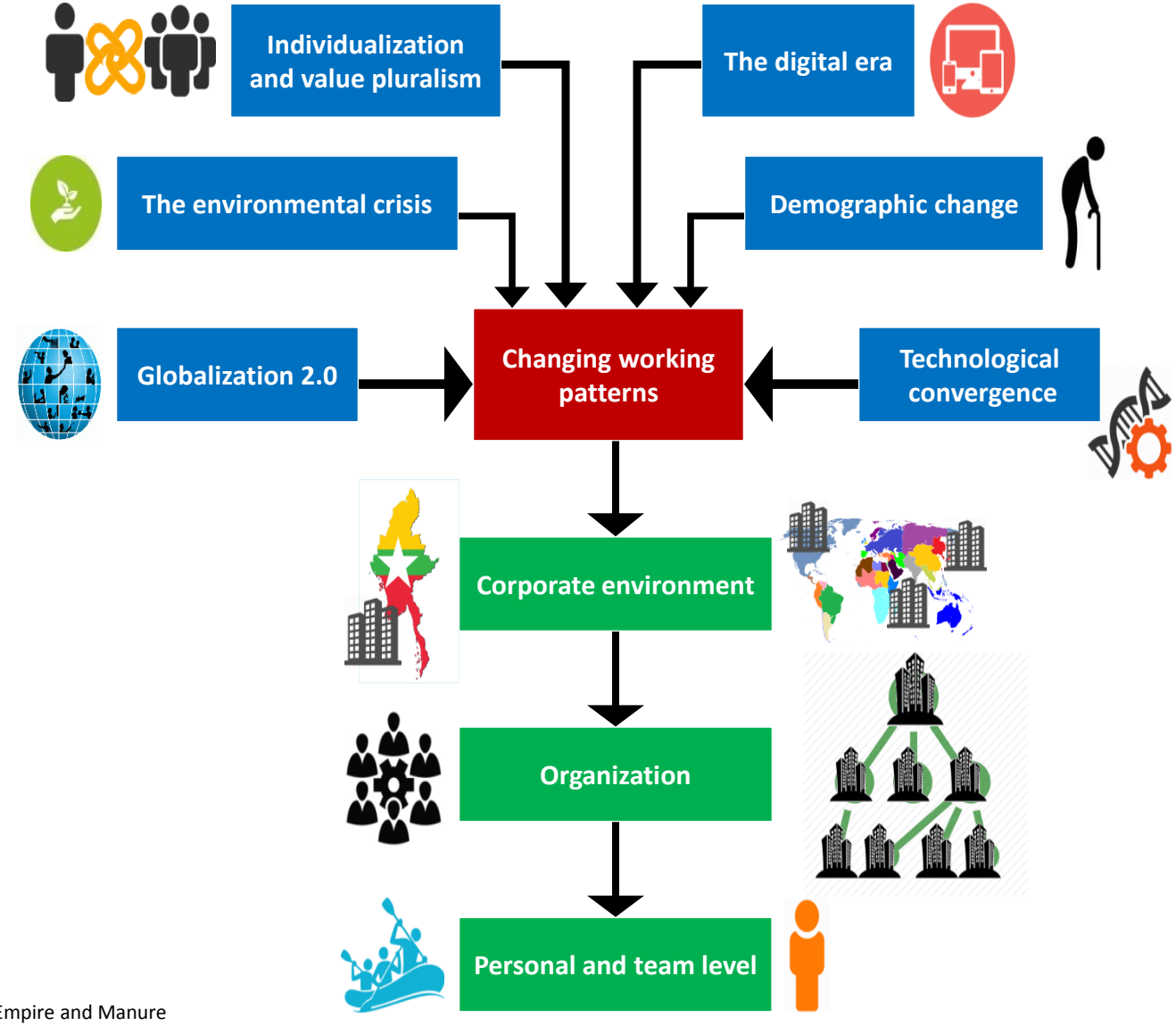
Reference: New Health: A Vision for Sustainability by PWC

USING TECHNOLOGY IN CARE DELIVERY

Past	Present	Future
• Large equipment—hospitals and doctors' offices	• Portable devices • Wearables • Smartphone-based • Virtual technology (e.g., telemedicine)	• Virtual (e.g., medical holograms, telemedicine) • Embedded (e.g., nanobots, sensors)
• Physician-focused	• Physician- and consumer-focused	• Consumer-focused
• No interconnectivity	• Limited connectivity	• Extensive connectivity • Wireless • Cloud-based
• Physical	• Physical and virtual	• Emphasis on virtual
• External	• Still mainly external	• Sensor-based, embedded (e.g., in home appliances, furniture, clothing) • Internal (in vivo devices – for diagnostics and treatment)
• Low-tech	• High-tech, limited integration and interoperability	• High-tech • AI-driven • Leverages Big Data, genomics, and analytics • Integrated • Interoperable

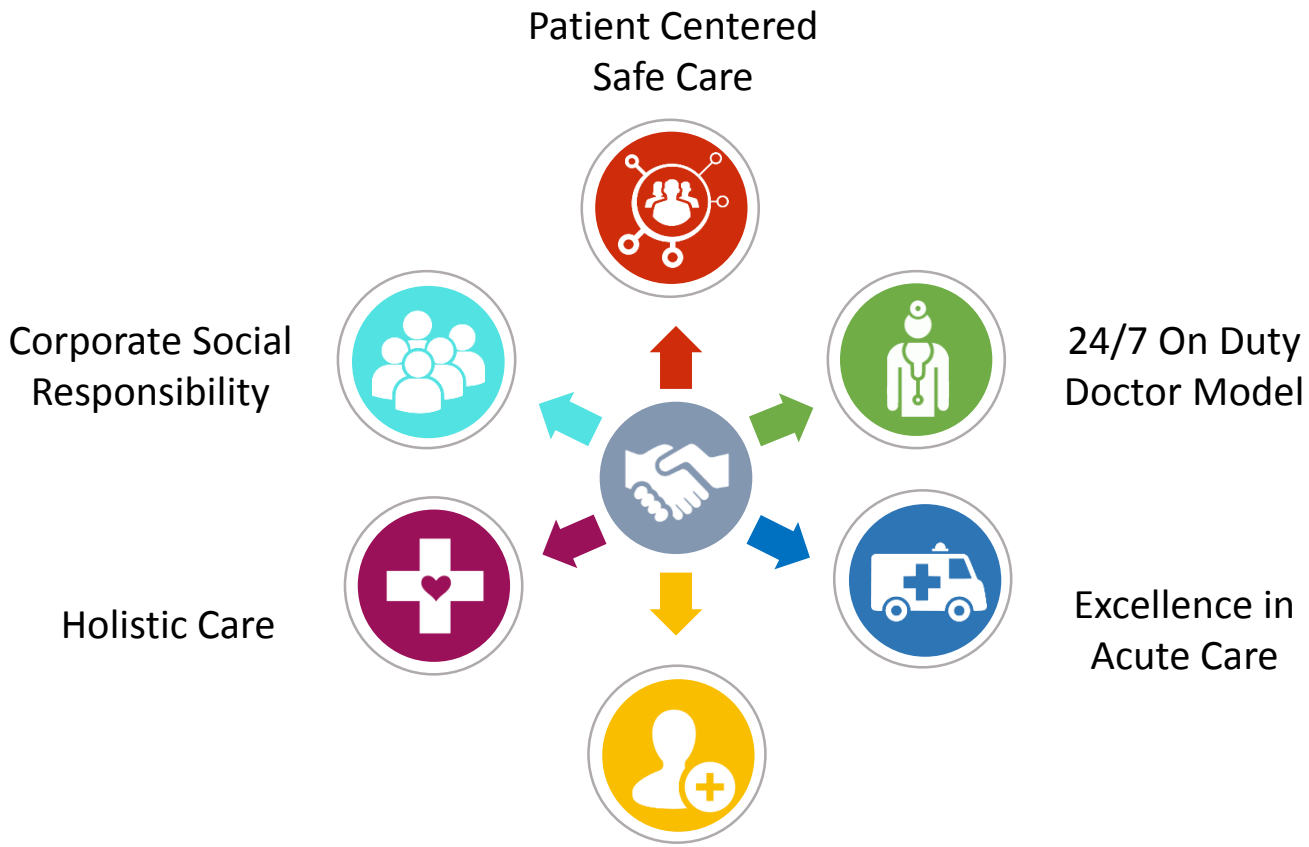
Reference: New Health: A Vision for Sustainability by PWC

THE SIX MEGATRENDS



Adapted from Introduction: Empire and Manure

OUR COMMITMENT



Thank You

Care with Compassion for the Nation