



GSMA Connected Living Workshop – mHealth in Asia Pacific

25 April 2012

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- Rule of thumb: do not exchange information in a meeting which you would normally consider a business secret

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Meeting agenda



Agenda	Speaker	Time
Welcome and introductions		09.00 – 09.05
Market opportunity for mHealth in Asia Pacific	Richard Cockle - GSMA	09.05 – 09.50
mHealth Services Deployment – Asia Pac –	Ilara Koroma - GSMA	09.50 – 10.20
Accelerating innovation: the power of the crowd	Andy Kim - KPMG	10.20 – 10.50
Coffee Break		10.50 – 11.10
Secured Health Information Network and Exchange (SHINE)	Stephanie Orlino - SMART	11.10 – 11.40
GSMA Programme and Diabetes campaign	Richard Cockle - GSMA	11.40 – 12.30

Introductions

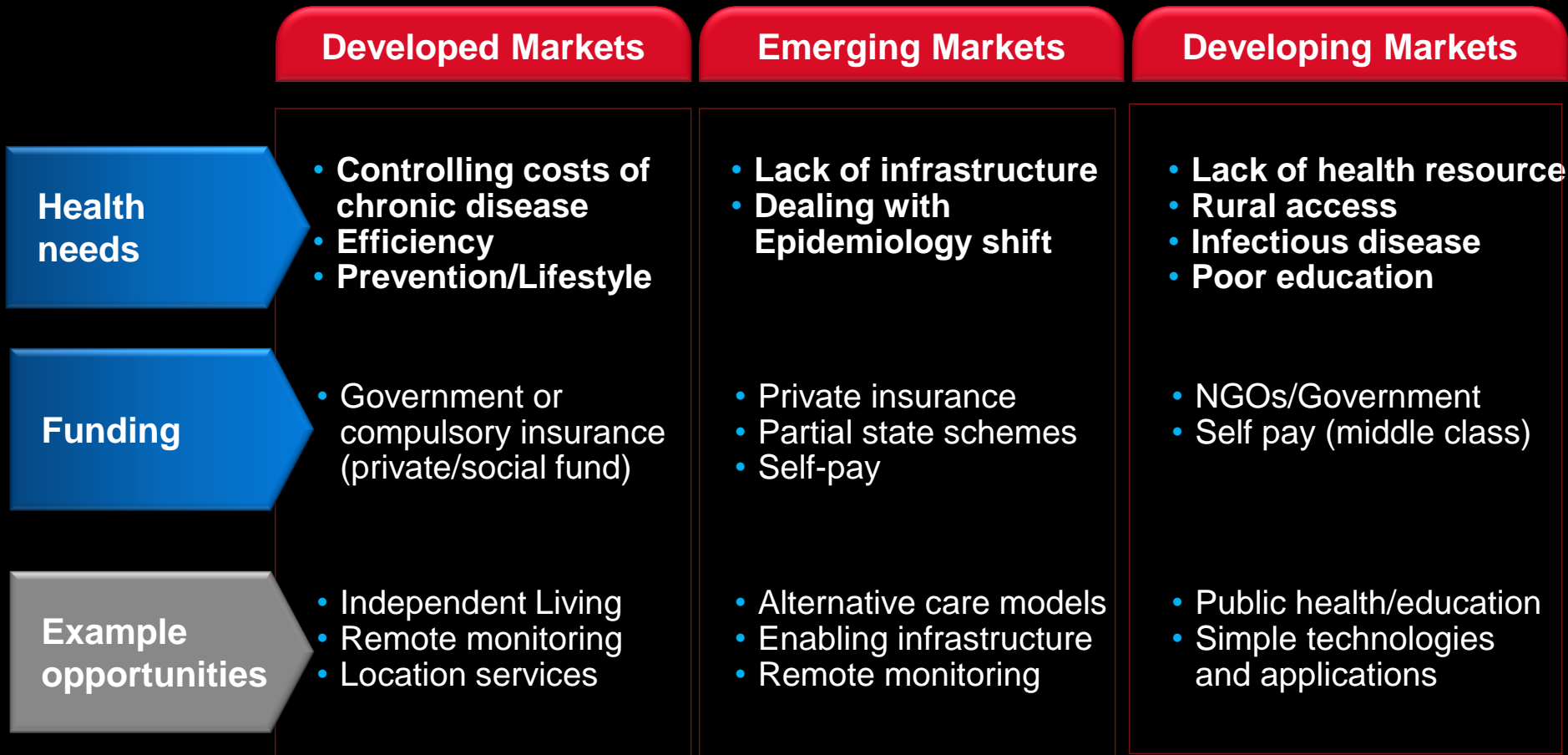


Market opportunity for mHealth in Asia Pacific

25 April 2012

Richard Cockle, Project Director, mHealth, GSMA

Healthcare systems are under pressure globally



The Mobile Health Opportunity

What is mobile health?



- “the delivery of healthcare services via mobile communication devices”

NIH mHealth Summit

- The term is most commonly used in reference to using mobile communication devices, such as mobile phones, tablet computers and PDAs, for health services and information. The mHealth field has emerged as a sub-segment of eHealth, the use of information and communication technology (ICT), such as computers, mobile phones, communications satellite, patient monitors, etc., for health services and information.

WHO Global e-Health Observatory 2010

Mobile services can enable new healthcare models

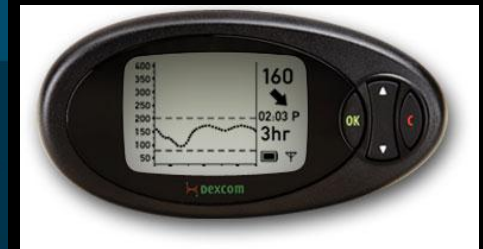
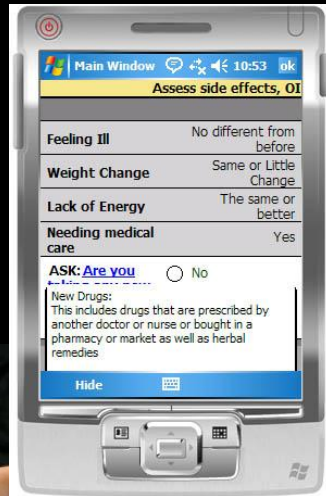


Prevention

Diagnosis

Treatment

Monitoring



And deliver patient as well as health system benefits



Solutions across the Patient Pathway

Prevention

Diagnosis

Treatment

Monitoring

Emergency Response

Healthcare Practitioner Support

Healthcare Surveillance

Healthcare Administration

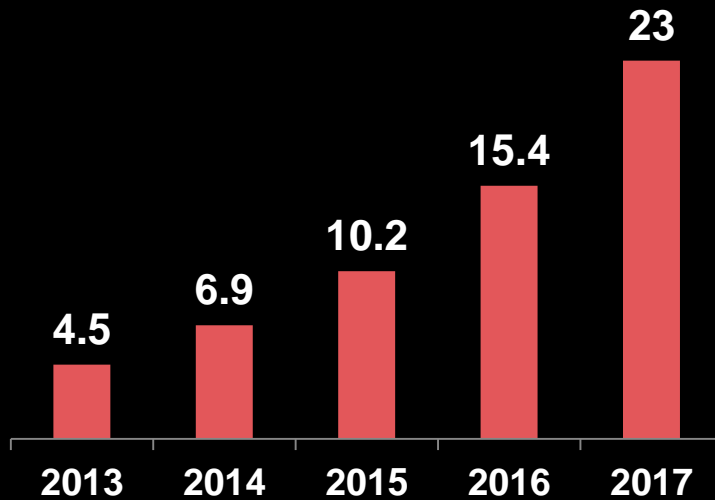
Healthcare Systems Strengthening

Source: Touching lives through mobile health, PwC February 2012

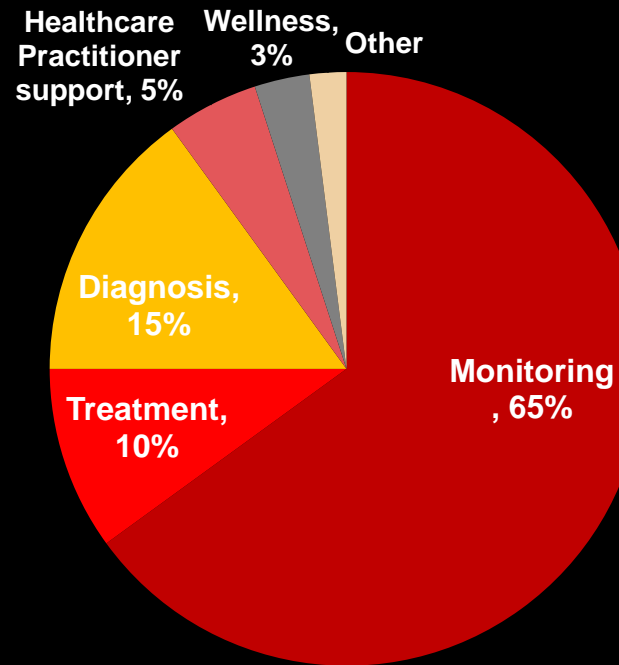
Significant increase in global revenue potential is foreseen over next 5 years to \$23 bn by 2017



Forecast global mHealth revenue (US\$ Billion)

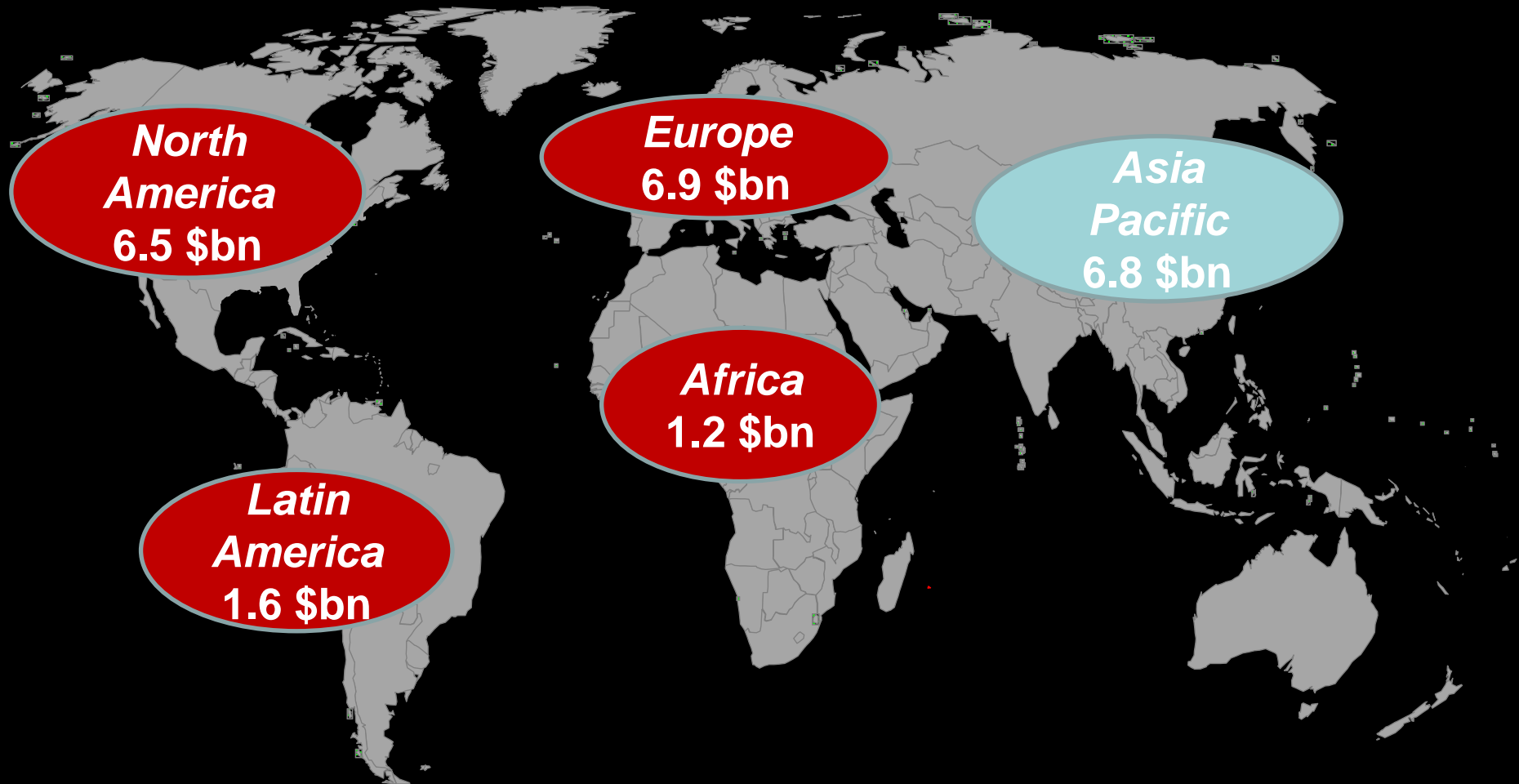


Source: PWC 2012



Monitoring represents 65% of global revenue opportunity

With opportunities across all regions

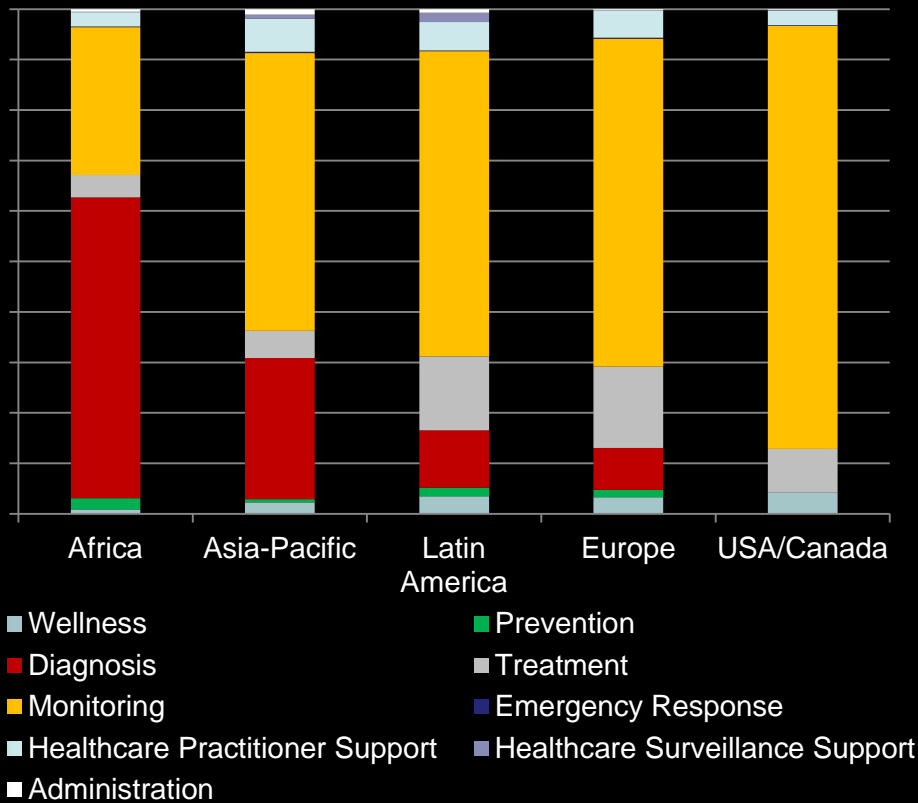


Source: PW, estimates for 2017

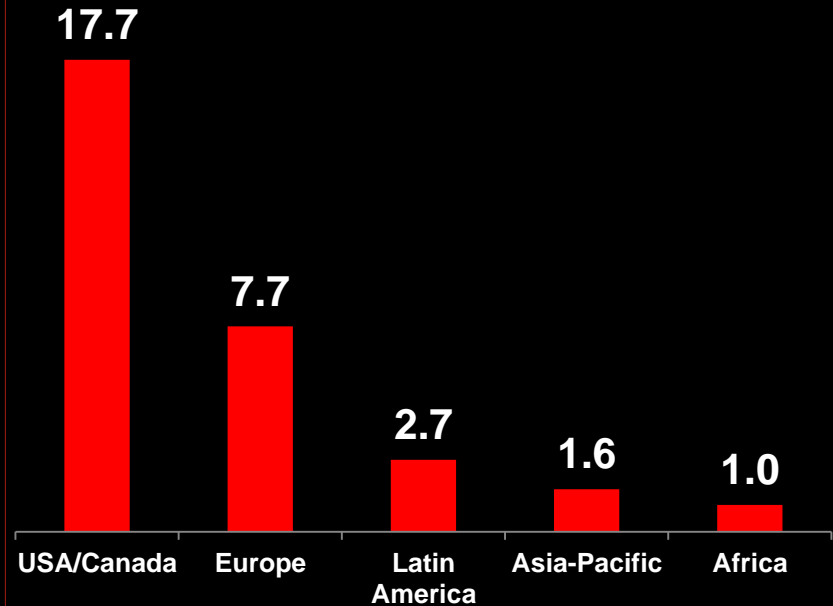
However, focus will vary from country to country



Mix of Revenues by mHealth Service Categories in Various Regions, 2017E



Mobile Health Spend per Capita (in USD) in Various Regions, 2017E

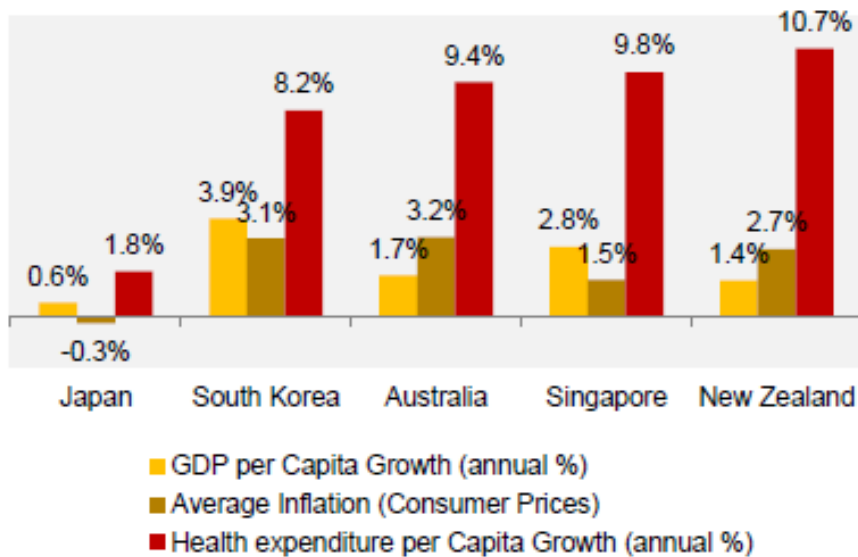


Source: PWC 2012

Characteristics of the Asian market

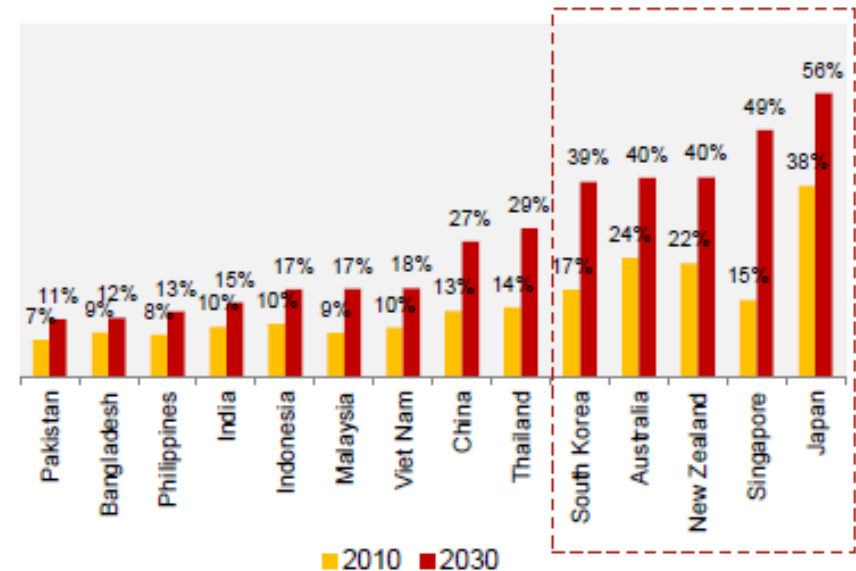


Annual Increase in GDP per Capita, Consumer Price Levels (Inflation), and THE per Capita in Selected Developed / Affluent APAC Countries, %, 2000-2009



- The per capita health care expenditure has risen much faster than GDP per capita and inflation
- Thus, the burden of healthcare is increasing on people and governments of these economies

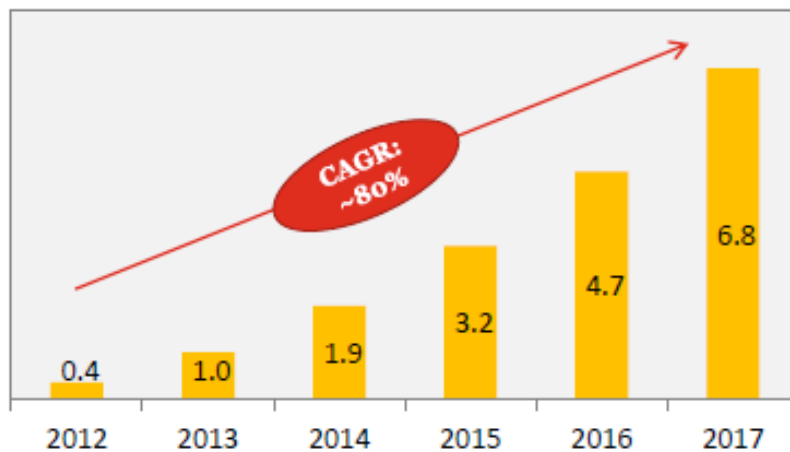
Old Age Dependency Ratios¹ for Asia Pacific Region, 2010 and 2030E



- Ageing populations are associated with a greater burden of non-communicable diseases such as diabetes, cancer, and cardiovascular problems:
 - The burden on the healthcare system is greater due to the conditions' complex and recurrent nature

Structure of the Asian market

Overall mHealth² Market Size in Asia-Pacific,
USD billion, 2012E-2017E



Note: 1. mHealth refers to the use of mobile communication and devices for providing healthcare services or achieving health outcomes. The mHealth market, calculated here, includes prices paid for mobile calls, data connectivity, VAS (Value-added services such as SMS/USSD/IVR), license/usage fees for applications, and special devices with mobile connectivity (e.g. for monitoring). It does not include the price of smart-phones or ordinary mobile phones. 2. Please refer the Appendix to examine the list countries included in each sub-region.
Source: PwC Analysis.

- APAC shows little homogeneity, containing a variety of markets spanning from highly urbanized, developed and prosperous countries, to low income and highly populated countries, to sparsely populated nations with wealthy but disconnected populations.
- The growth drivers for mHealth vary by sub-region²:
 - Developed and urbanized markets such as Japan will be high in the uptake of Monitoring services due to greater prevalence of non-communicable diseases and high/growing number of elderly people, coupled with high ability to pay
 - Prosperous but sparsely populated markets such as Saudi Arabia will also be high in the uptake of diagnostics through the use of telemedicine to connect rural populations
 - Middle-income countries will have a reducing demand for diagnostics as income levels and access rise, whilst showing an increasing need for monitoring of long-term conditions such as diabetes
 - The poorest countries such as will see a relatively high uptake of diagnostics due to the lower availability and affordability of healthcare services

The different characteristics of the Asian Markets

Drivers	India	China	Thailand	Malaysia	Japan
Low penetration of physicians	✓	✓	✓		
High rural population	✓	✓	✓		
High burden of communicable diseases	✓	✓	✓		
High / increasing affluence (GDP per capita)	✓	✓	✓	✓	✓
High/increasing burden of non communicable diseases	✓	✓	✓	✓	✓
High elderly population					✓
Large / growing number of hospitals		✓			✓

Opportunities in Prevention, Diagnosis, Treatment, Healthcare Systems Strengthening

Opportunities in Wellness

Opportunities in Treatment and Monitoring

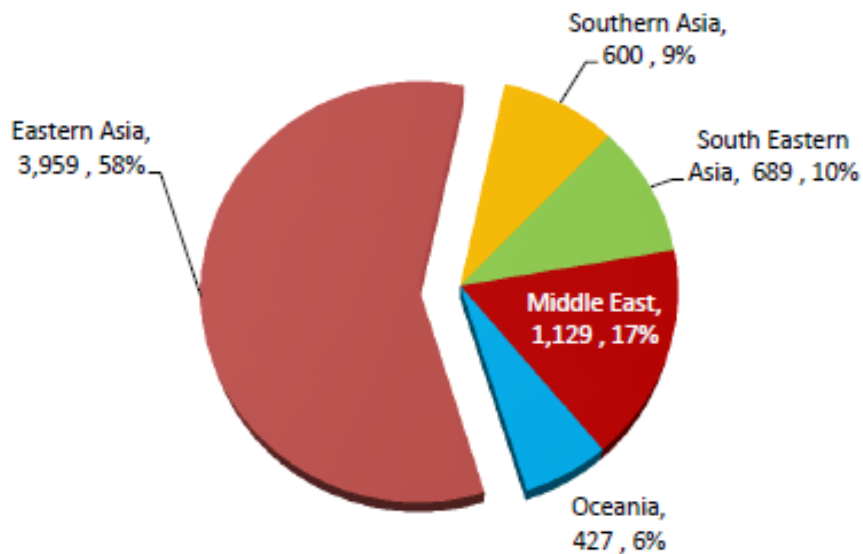
Opportunities in Healthcare Systems Strengthening

Market analysis



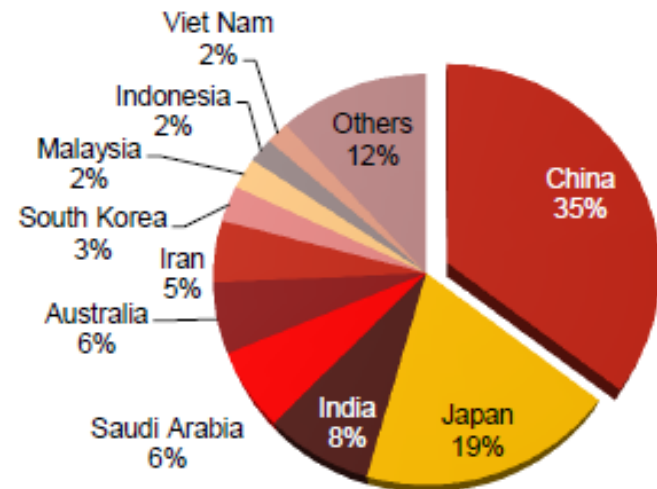
Asia-Pacific mHealth Market Size – Split by Sub-regions, USD million, Asia-Pacific, 2017E

Overall Size (2017): USD ~7 billion

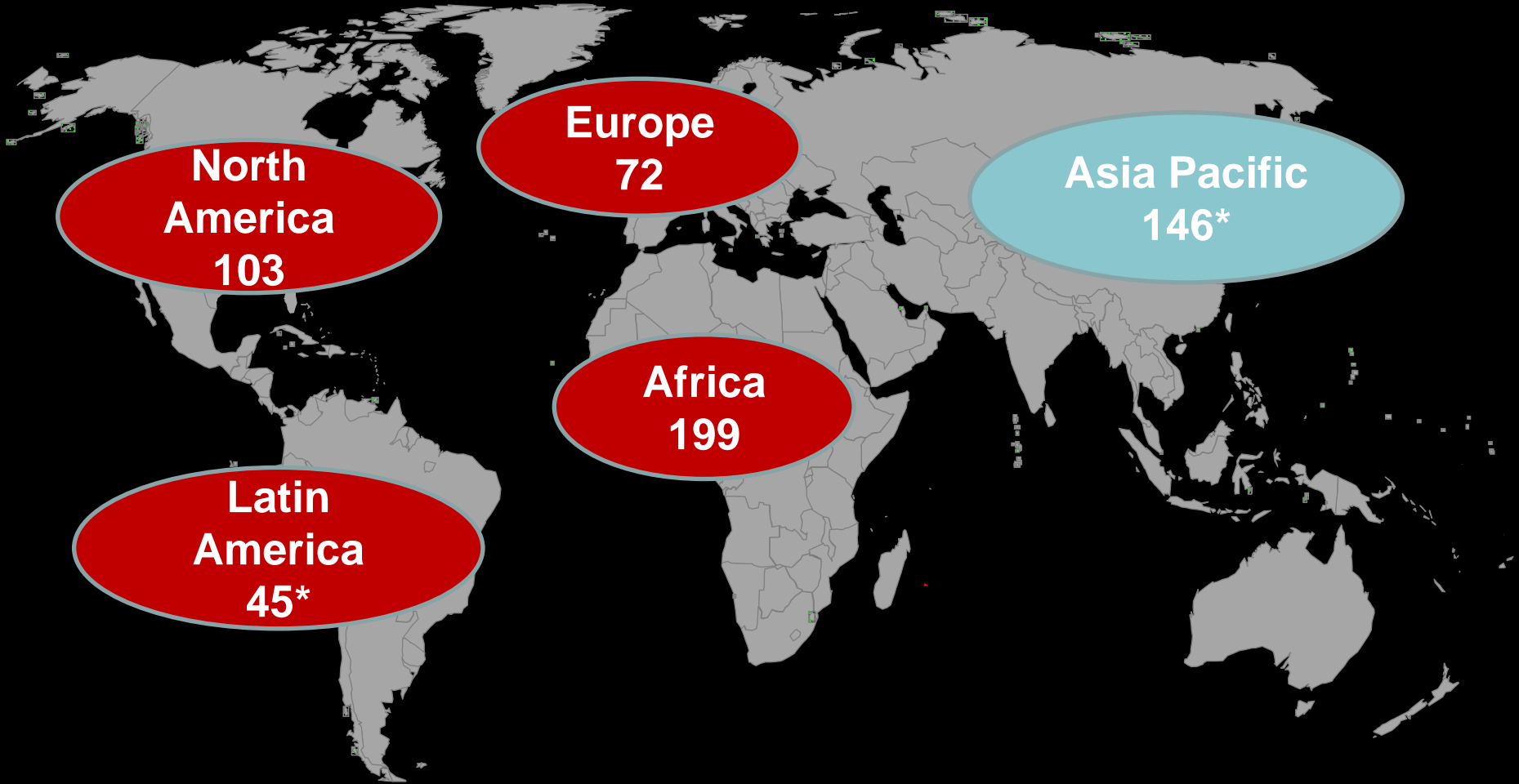


Asia-Pacific mHealth Market Size – Split by Countries, USD million, 2017E

Overall Size (2017): USD ~7 billion



Already 565 mHealth deployments worldwide



Source: GSMA Mobile Health Services Deployment Tracker, March 2012

Sample case studies from around the world



Key scaling factors to enable mHealth



Government Thrust

- Governments are important stakeholders
- Government policies will encourage mass uptake of services e.g. Reimbursement

Regulatory support

- Certification of devices
- Standardisation and interoperability

Physician Acceptance

- Gain buy-in and support of Physicians through stakeholder engagement
- Partner with the Healthcare industry to develop trust – e.g. trials

User Adoption

- Affordability of solutions and devices
- User friendliness of solutions e.g. Plug and Play

Any Questions