GSMA programme and Diabetes initiative

25 April 2012

Richard Cockle, Project Director, mHealth, GSMA
To reduce the cost to serve, extend reach and improve quality of care to patients, by accelerating the development and adoption of scalable and interoperable operator led mobile health solutions.
GSMA’s programme entering the 3rd year

2010/11
Foundation

Framing the opportunities and challenges for Mobile Health

2011/12
Capabilities

Developing the capabilities and knowledge to be able to accelerate a scalable sustainable market (e.g. reference architecture, evidence guidelines, device regulation)

2012/13
Market Acceleration

Addressing the existing market barriers and pushing for market acceleration of Mobile Health, where mobile operators play a leading role in creating a scalable and interoperable market
GSMA mHealth programme objectives

Objectives:

- Showcase mobile health solutions and catalyse cross-industry awareness and knowledge
- Demonstrate the outcomes and impacts on individuals, healthcare systems and society
- Foster new relationships and partnering with the healthcare sector and mobile industry
- Stimulate scalable and replicable solutions and drive towards interoperability at critical junctions
- Promote supportive policy and regulatory principles for growth and innovation
Connected Living: mHealth Objectives 2012/13

Mission
To reduce the cost to serve, extend reach and improve quality of care to patients, by accelerating the development and adoption of scalable and interoperable operator led mobile health solutions

Strategic Objectives 2012/13

Market Acceleration
- Increase the number of operator led mobile health trials and service launches that generate clinically relevant evidence and demonstrate the use of operators assets beyond connectivity

Increase Market Pull
- Stimulate the demand side of mobile health ecosystems to drive the need for mobile health solutions to be introduced into the market

Promote Operator Assets
- Generate awareness by healthcare industry and providers on benefits of operator assets to mobile health solutions, creating the way to more services beyond connectivity in mobile health

Stakeholders Buy-in
- Create a favourable and conducive environment for the acceleration of mobile health solutions, by addressing key decision makers (payers, governments and regulators)
Focus of activities for

Enablers
- Technology and Interoperability
- Policy and Regulation
- Strategy and Markets

Evidence
- Outcomes and Impacts

Advocacy
- Engagement
- Promotion

Pilot Programme
Focus on operator ‘Value added services…

Operators roadmap to successful Healthcare deployments

Operators are at different stages in their development

Operators will require different types of support depending where they are in the development cycle

Market Insight
Best Practice
How to guidelines

...and generating system change

Market Shaping
System Impact
Advocacy
Market activation strategy

Mission
To reduce the cost to serve, extend reach and improve quality of care to patients, by accelerating the development and adoption of scalable and interoperable operator led mobile health solutions

Chronic Disease Programme - Diabetes

Over 346 million people worldwide have diabetes, it is forecast to double over the next 20 years. In some regions it already has prevalence levels 20 – 25%. The nature of the disease means that patients require regular monitoring, making it the perfect candidate for mobile health. Operators have identified diabetes as a key area of their strategy and are keen to collaborate to develop scalable solutions with sustainable business models. The aim is to create a Hero programme that can focuses the efforts of the programme, while the background work continues. Bringing operator together to focus on a common goal, including all types of tech SMS – EM Sensor.

High level deliverables
• Campaign Vision, scope, objectives; Diabetes summit to agree common approach; 10 operators sign up to running trials

Regional Engagement Plans

Every region is at a different stage of their understanding and uptake of mobile health. The key stakeholders are different so if the GSMA is to have an impact it will need to tailor its engagements to the specific requirements of the region.

The regional plans will be made up of the deliverables contained with this phase of the project and ongoing activities.

Examples:
US - End user research, Engagement: Direct with FDA, Continua US policy WG, Continua Tech WG Showcase at HIMSS, etc
### Planned activities

<table>
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<tr>
<th>Focus countries</th>
<th>Evidence</th>
<th>Market insight</th>
<th>Policy &amp; Regulatory engagement</th>
<th>Technology</th>
<th>Events</th>
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<tr>
<td>Japan &lt;br&gt; India &lt;br&gt; China</td>
<td>- Track mobile operator trial programme &lt;br&gt; - Promote GSMA evidence framework &lt;br&gt; - Provide support on trial design</td>
<td>- Complete End user research in India and China &lt;br&gt; - Promote results with relevant stakeholders</td>
<td>- Engagement with GSMA Spectrum team and COAI in India &lt;br&gt; - Support and participate in ongoing Continua Health Alliance activities</td>
<td>- Promote interoperability and common standards &lt;br&gt; - Educational material for region</td>
<td>- GSMA Connected Living Asia Summit</td>
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### Development Fund planned activities

- **Qtel**: Indonesia – defining market opportunity and go-to-market strategy for launching Health Hotlines
- **Kuwait** – defining the value proposition of Health Information Systems
- **Bihar, India** – ongoing work with Gates Foundation, BBCWST, WHP and Care to launch and scale services to 100 m people.

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**Healthcare system**: Combination of universal healthcare system and out of pocket

**Government and Regulatory Awareness**: varied level of awareness and activity

**Approach**: Country by country approach.

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**Current mHealth deployments**: Total: **111**<br> Operator Led: **34**

**Expected Market size**: ~**6.8 billion** in 2017
Publications 2011/12


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Key Achievements 2011/12

Strategy and Markets
- Published global report on the $23 billion mobile health market revenue opportunity
- Agreement from Minister of Health Catalunya to support Mobile World Capital and create a test bed for mobile health services
- Launched global mobile health University challenge with 26 university participating and entries from MIT, Berkeley and Oxford
- GSMA mHealth services and device deployment trackers launched, now tracking 569 worldwide deployments
- Analysis of the key challenges faced by the stakeholders that have deployed mHealth
- Publication of 9 new mobile health case studies

Technology and Interoperability
- Joined Industry Advisory Board to EC Renewing Health Programme (£14m programme/14 projects in 9 EU countries)
- Gained agreement for mobile use cases to be accepted into 2013 release of Continua guidelines
- Successfully lobbied for a Mobile Operator to be made chair of Continua Technical working
- Built relationships with HIMSS and participating EU mHIMSS working group
- Develop positions with the working group on the role mobile operators can play in mHealth solutions, how their assets can be leveraged and the role of the SIM (UICC)

Policy and Regulation
- Achieved a joint position on medical device regulation with Continua Health Alliance
- Engaged in EC 2012-2020 eHealth strategy programme and submitted consultation response
- Roundtable held with key regulatory stakeholders in Brussels including EC representatives
- GSMA educational material on medical device regulation
- Built relationships with COCIR, EUCOMED

Evidence
- Launched analysis of available evidence for mHealth in healthcare research and published guidance on the approach that should be used in significant health economic and clinical evidence for mHealth solutions
- Invited to join NIH evidence generation programme
- Invited to join 2 MNO trial teams to provide support and guidance where possible.
Connected Living mHealth – Diabetes

25 April 2012 - Seoul
Global Market Situation

- There is an ever growing burden of unsustainably rising healthcare costs across the world
- Healthcare expenditure forecast to reach some $6 trillion by 2011.
- The healthcare market is increasingly becoming a financial drain on most economies in the world
- Healthcare costs are expected to outpace GDP growth and absorb 15-25% of OECD countries’ GDP.
- This will lead to a situation that is unsustainable and likely to result in market structure breakdown and system reform. (G20 warned by standard & Poor of credit downgrade if not addressed)

Financial burden on healthcare provision demands innovation
Diabetes Facts

- 346 million people worldwide have diabetes, In some regions it already has prevalence levels 20 – 25%.
- In 2004, an estimated 3.4 million people died from consequences of high blood sugar
- More than 80% of diabetes deaths occur in low- and middle-income countries
- WHO projects that diabetes deaths will double between 2005 and 2030
- Healthy diet, regular physical activity, maintaining a normal body weight and avoiding tobacco use can prevent or delay the onset of type 2 diabetes.
- Diabetes required frequent monitoring on a frequent basis, daily it not more.

A major non-communicable disease and growing, with huge impact on resources
Diabetes device market

- The global market for products in the management of diabetes currently stands at $41 billion.

- Set to grow to over $114 billion by 2018.

- Products include glucose meters, lancets, test strips, continuous blood glucose meters, insulin, insulin pumps, syringes.

- The most significant growth will come from continuous blood glucose monitors, which provide significantly added clinical benefit at only a modestly higher cost compared to standard blood glucose meters.
Diabetic Journey

Solutions across the Patient Pathway

Wellness & Prevention
- Preventions of the onset of the disease
  - Life style management
  - Diet and weight management
  - Exercise management

Diagnosis
- Diagnosis of the disease
  - Health tips for diagnosis and health information
  - Self test kits

Monitoring
- Monitoring and management of the disease
  - Treatment coaching
  - Smart Devices and applications for
  - Medication refill

Solutions across the Healthcare systems

Multiple touch point opportunities for mobile providers
Real market example of the opportunity

US diabetes market forecasts between 2010 – 2020

- **Americans with diabetes 2010**: $26 Million
- **Americans with diabetes projected in 2020**: $39 Million
- **Americans with prediabetes 2010**: $79 Million
- **Americans with prediabetes projected in 2020**: $96 Million
- **Total US healthcare spend in 2010**: $194 Billion
- **Total estimated US healthcare spend in 2020**: $500 Billion

**Estimated total US spend on diabetes-related care over the next decade**: $3.40 Trillion

Sources: Centers for Disease Control and Prevention and UnitedHealth Group's Center for Health Reform & Modernization Report: "The United States of Diabetes: Challenges and Opportunities in the Decade Ahead"
Diabetes programme structure

- Develop a mobile operator community to accelerate mHealth in diabetes
- Diabetes knowledge sharing between the mobile ecosystem
- Diabetes stakeholder analysis and engagement
- Development of industry tools
  - Collect common evidence
  - Provide examples of best in class app and device/solutions
- Identify key barriers where industry level engagement will benefit
- Host a diabetes summit to bring mobile ecosystem in partnership with the diabetes community
Any Questions