mNutrition: Behaviour change in 160 characters or less?
Introducing the mNutrition initiative

The mNutrition approach to BCC

- Knowledge dissemination vs. BCC
- Understanding our “consumers” and end users
  - Beyond ensuring the message is understood
  - Profiling and testing to tease out motivations, barriers, aspirations
  - The limits of SMS
    - Linking consumers to tangible resources through the mobile channel
    - Using other mediums – audio, video, quizzes, social media etc.

Anticipated impact: The case of Wazazi Nipendeni (Tanzania), Farmer Club (Ghana)
mNutrition: An Introduction
WHAT IS THE GSMA MNUTRITION INITIATIVE

DFID funded project to the GSM Association (GSMA) to develop and scale-up the delivery of nutrition messages through existing agriculture and health mobile phone platforms.

Aim:

- To reach at least 3 million people in **8 countries in Africa** (Nigeria, Ghana*, Malawi*, Mozambique, Tanzania, Kenya, Uganda, Zambia – all health) and **4 countries in South Asia** (Pakistan, Sri Lanka, Bangladesh and Myanmar – all agri)
  * = both agri and health

- To ‘improve nutrition for the poor as a result of behavior change promoted by accessible mobile-based services delivered at scale through sustainable business models.’
WHAT IS THE ROLE OF GAIN AND THE GLOBAL CONTENT CONSORTIUM?

The GCP consortium: ensures that high quality and validated content is developed in alignment with global evidence, national priorities and local context including:

- Development of detailed national nutrition landscape analyses;
- Development of both a global content framework and country specific content frameworks which determine content development needs (e.g. language, channel);
- Development of a centralized knowledge bank in which to organize all government validated factsheets and messages;
- Development of quality assurance processes and quality control;
- Development of localized and validated mobile ready content with the support of a local content partner for 14 services (12 countries);
- Development of tools to support local content partners: especially in terms of the meaning of localized content: Locally relevant/understood vs. locally generated/meeting the needs of local users.
• Global & local validated source content will be uploaded to a central database – the nutrition Knowledge Bank
• Local Content Partners will create health and agri focussed nutrition factsheets by country
• Factsheets will be validated in country by relevant stakeholders (e.g. Govt agencies)
• Local Content Adapters will create sets of key nutrition based mobile messages
• Mobile messages will be validated in country by relevant stakeholders (e.g. Govt agencies)
• All content will be centrally stored on the nutrition Knowledge Bank for use by multiple mobile services
The mNutrition approach to BCC: Human-centred design
**MNUTRITION USER GENERATED INSIGHTS**

**My barriers**
Lack of knowledge does not seem to be the key barrier to nutrition in the system. Barriers such as lack of money to purchase nutritious foods, lack of proximity to nutritional foods and overall dietary preferences limit good nutritional and health behaviours.

**I am motivated**
Across the board the key motivator for any change in behaviour will be the belief that changes will lead to a better future for their children. Anything that will make their children smarter and more successful is a message they will try and undertake.

**I trust**
The health trust network is vast with users and includes chemists, health care practitioners, traditional healers but also non health related players such as priests who perform blessings and key influencers such as caretakers and male partners.

**I am traditional, sometimes**
While I don’t always use a traditional healer and I may prefer modern medicine, I will or have in the past try/tryed herbs and traditional medicines as a first point of call. The older generations are likely to trust traditional medicine, with the modern youth leaning towards modern medicine.

**We eat together**
During certain meals, specifically dinner we eat as a family, or at least as many of us as possible. Meals are often shared, with the hierarchy of food distribution still in play.

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"It’s not about changing, that is not hard. It’s because I love those foods (starch based)- I love them.”

"I know if I had more money, I would eat better.”

"I don’t want what happened to me to happen to my daughter.”

"I want my son to be intelligent and successful.”

"If the priest can’t heal my children, I take them to the chemist.”

"If my daughter is sick I take her straight to the hospital. I know sickness can be very dangerous for young children. But for me, I’ll wait as long as possible and then maybe go to the clinic if it doesn’t go away.”

"One man said we had to feed her (sick mother) vegetables…he was a local healer.”

"I would rather go to the clinic because I know I will get quality care there….I don’t like herbs, they taste bitter.”

"My extended family eats the some food together once a month.”

"I go home and check if they have eaten and if they haven’t, we eat together. I like it when we eat together.”

www.gainhealth.org
USER PROFILING IN GHANA

Nana: The Caretaker

“My children rely on me for information. They always ask me for advice...I have been around a long time. I know things.”

William: The Financer

“I spend money on them so can become better (educated). In the end, they will look after me.”

Sewaa: The Impressionable

“I ask my friends and family for advice and when they don’t know, I go to the traditional healer in the markets.”

Juliet: The Modern Woman

“I go to the clinic when I am sick...I need to see a professional, then you know you are getting quality.”
NANA: The Caretaker

**SOMETHING ABOUT ME**

I am 55 years old and live in Dodowa. I make money by smoking fish and selling it but only when I am not too tired. I get tired in my old age. I go to church regularly as it helps keep my connection to Jesus Christ. I get to see my pastor and my friends. I think schooling is very important but I never got to finish school. I left in primary school to help my mother who also used to smoke fish and I have been doing it every since. It's hard to look back and have regret but I did what I needed to for my family.

**ABOUT MY FAMILY**

I am married with 8 children. I am blessed with 7 grandchildren. I spent most of my youthful life taking care of my children. I have enough experience to influence the care of my grandchildren and I take care of them often. I encouraged my children to not have so many children early on in life, so they can care for them properly when they have them. I have done this so many times, I know all there is to know about raising children. My neighbours always ask me for advice because of it.

**MY THOUGHTS ON HEALTH AND NUTRITION**

I have been eating the same foods since I was young. I eat what my mother ate and what her mother ate before that and we all turned out fine. I hear ladies at the market talk about how garlic and moringa is good for you, so I have started to try it at home and told my kids about it. When I am sick, I go to the healer nearby. They give me herbs and that always works fine. When it doesn't, I leave it to god to heal me.

I want a better future for my grandchildren. To be smart, it is everything. I want to make sure that this happens.

mNUTRITION: UNDERSTANDING OUR USERS | A PARTNERSHIP BETWEEN GAIN AND GRAMEEN FOUNDATION
NANA: The Caretaker

Nana represents women that are motivated by messages that:

• Makes her family smarter and supports her role as the matriarch
• Make her feel that she is doing something that would be approved by her church leaders
• Makes her feel that her family and herself will be physically and mentally stronger
• Makes her feel that the traditions she believes in are not being attacked
• Makes her feel that she is protecting her family

WHAT ARE MY EXAMPLE MESSAGES

I prefer to receive voice messages in my local language as I am illiterate.

"The other foods given to your grandchildren need not to be only Koko but modified family food such as food without pepper and mushy foods such as Mpoto. Remember the fruits and vegetables."

"To prevent your grandchildren from becoming malnourished you need to start adding other foods at 6 months. Remember to continue breastfeeding for up to 2 years of age and beyond."

"Handwashing with soap and water before and after feeding or cleaning the baby and after going to the toilet, will help you protect your family from serious illness."

I am an elder female influencer, I believe in the traditional methods for health and nutrition and I use my mobile phone sparingly.
RECOGNIZING THE LIMITS OF SMS
LESSON 1:
AUDIENCE SEGMENTATION IS ESSENTIAL

Gathering insights from users

Generating and validating user personas

Message formulation, user testing and feedback

Across the board the key motivator for any change in behaviour will be the belief that changes will lead to a better future for their children. Anything that will make their children smarter and more successful is a message they will try and undertake.

“I want my grandson to be intelligent and successful.”

“I am motivated

Nana: The Caretaker

My children rely on me for information. They always ask me for advice...I have been around a long time. I know things.

“Preparing meals with fortified cooking oil helps ensure your child gets some of the vitamins needed to stay healthy. Healthy kids do better in school.”
RECOGNIZING THE LIMITS OF SMS: LESSON 2: SHORT, SNAPPY, ACCURATE BUT BCC-CENTERED IS TOO MUCH FOR TOO LITTLE!

Characters used are limited to 160 – pressure to reduce message to facts (cutting out insights, barriers, motivations etc.)
- If the goal of the message is vitamin K injections – messaging gets reduced to pushing the woman to deliver at the health facility without explaining the benefit. This may not lead to increased knowledge (e.g. of the injection) and may not address the motivations/barriers around delivering at a health facility (e.g. if no rationale for why, suggestion may be easily dismissed)

Health messaging and the tendency for clinical to triumph over user understandability:
- Anemia vs. “low blood”
- Expressing milk vs. “squeezing”
- Diarrhea vs. running stomach

Goals of messages may not be adequately understood
- Messaging on cooking meat fully understood as making food more palatable to baby, who will then eat more – not understood that the concern is food-borne illness

SOLUTION? USER TESTING, USER TESTING, USER TESTING but there is still only so much that can be said in 160 characters.
SMS, especially push services, aren’t very interactive and generally lead to a passive transfer of knowledge.

In the Start Smart project in South Africa, a mobi site has been developed for users to solidify their knowledge on MICYN topics through quizzes, rewards etc.

In the GAIN Baduta project, users are able to engage with content through digital media (adding comments, likes etc. on Facebook).
In the mNutrition project all messaging is aligned with Government to ensure that it is generating demand for real interventions, accessible by individuals on the ground within their own communities.

Messaging supports that already disseminated on the subject by community health workers, nurses and midwives.

But, this doesn’t compare to the 360 degree SBCC approach used by GAIN in other projects. There is a real need to use multiple channels and going forward the mNutrition project partners should ensure Factsheets we developed are available to all partners developing other SBCC materials for other channels (linking messaging via all mediums together for end recipients).
Assessing the impact of mNutrition to date
### Anticipated Impact of mNutrition: Messaging Out Through Services

<table>
<thead>
<tr>
<th>Service Details</th>
<th>Ghana (mAgri)</th>
<th>Tanzania (mHealth)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name of product</strong></td>
<td>Farmer Club</td>
<td>Wazazi Nipendeni (My parents love me)</td>
</tr>
<tr>
<td><strong>Mobile Operator</strong></td>
<td>Vodafone</td>
<td>Vodacom, Airtel, Tigo, Zantel</td>
</tr>
<tr>
<td><strong>Service provider (VAS)</strong></td>
<td>Esoko</td>
<td>mHealth PPP (CDC Foundation + MOHSW)</td>
</tr>
<tr>
<td><strong>Service content areas</strong></td>
<td>Tips on 25 Agricultural commodities (including agric tips, weather and market info). *Integration of 13 new nutrition-sensitive crops and Tilapia</td>
<td>Maternal and Child health *Integration of 100 messages in the free service (mostly on supporter and CHW channels), with full content to be available on a new premium channel.</td>
</tr>
<tr>
<td><strong>Core service details</strong></td>
<td>Vodafone Farmer's Club members get 4 SMS messages on the crop of their choice per week (1 agric tip, 2 weather information and 2 market pricing). Farmers get a nutrition tip once per month. Farmers can also call the Esoko call center at anytime for more information. Calls are free for Farmer Club Members. Cost to become a Member is 0.50 USD per month.</td>
<td>Users are registered for the service by CHWs during clinic visits. Many people also self-register (particularly on the &quot;information seeker&quot; channel). Wazazi also has channels for the pregnant woman herself, &quot;supporters&quot; and Community Health Workers. Service is 100% free to end users.</td>
</tr>
<tr>
<td><strong>Languages</strong></td>
<td>SMS in English only but 12 local languages can be accessed through the Call Centre.</td>
<td>Swahili</td>
</tr>
<tr>
<td><strong>Service business model</strong></td>
<td>Private sector service</td>
<td>PPP - MNO zero-rated service</td>
</tr>
<tr>
<td><strong>Service users</strong></td>
<td>43,000 *Launched October 2015</td>
<td>1 million *Launched in 2012</td>
</tr>
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### mNutrition Content Details

<table>
<thead>
<tr>
<th>Content Domains</th>
<th>Ghana (mAgri)</th>
<th>Tanzania (mHealth)</th>
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</thead>
<tbody>
<tr>
<td><strong>Content Domains</strong></td>
<td>25 Factsheets on food information 65 Factsheets on each crop production and protection for the following crops: Okra; Aleefu/Ayoyo; Carrots; Cabbage; OFSP; Sweet Pepper; Locust bean; Papaya; Cashew Nut; Bambara nut; Watermelon; Ginger; Avocado 8 Factsheets on Tilapia production</td>
<td>42 Factsheets for all target groups (WRA, Adolescents, Pregnancy, Post-Partum, Newborn, Infant, Young Child) 20 Factsheets on food information (general nutrition, hygiene, food preparation)</td>
</tr>
<tr>
<td><strong>Content Format Created</strong></td>
<td>1630 SMS and 489 voice transcripts</td>
<td>927 SMS messages and 300 voice transcripts</td>
</tr>
</tbody>
</table>
To date, GAIN has implemented the project with 4 Local Content Partners, embedding messaging in 6 mHealth and 1 mAgri service across 3 countries: Ghana, Nigeria and Tanzania. The project is now at the midline.

- Messages sent to **1.5 million** users across Ghana, Nigeria and Tanzania
- Users reached in **9** local languages **In both SMS and IVR**
- **4** Partners trained in developing high quality, evidence-based health and nutrition messaging.
- **2,500 Text Messages** Localized and validated by experts in 5 countries
CONCLUDING THOUGHTS ON MNUTRITION

**Primacy of user insights:** No matter what medium used to disseminate BCC messages, user insights are essential to driving at motivations, aspirations, and overcoming barriers. Without users at the center, messaging becomes too clinical and instructive, missing the points which would create change entirely. Constrained by 160 characters, it is very easy to focus only on conveying essential info, and missing the BCC components entirely.

**Mobile as a complimentary tool:** When using mobile especially, messaging must be in alignment with national policies/programs. As mobile cannot change realities on the ground (no effect on real barriers) it can highlight to users how to access resources that are available to them.

**Beyond SMS:** Text may be a good start in some cases. Early on we realized in contexts like Ghana, that we needed to generate voice recordings or risk missing our target demographic entirely. Increasingly even users at the bottom of the pyramid are able to afford basic smart phones and are looking for more engagement with user generated content (e.g. social media, blogging, instagram etc.).