# Konsulta

Low-cost omnichannel triage

Problem Statement

For the urban poor in Cebu, **opportunity cost (time + money)** is the biggest barrier to healthcare.

Proposed Solution

Konsulta is **low-cost omnichannel triage** that enables urban poor communities in Cebu City to access healthcare information & services easily through the most-used messaging channels by Filipinos.
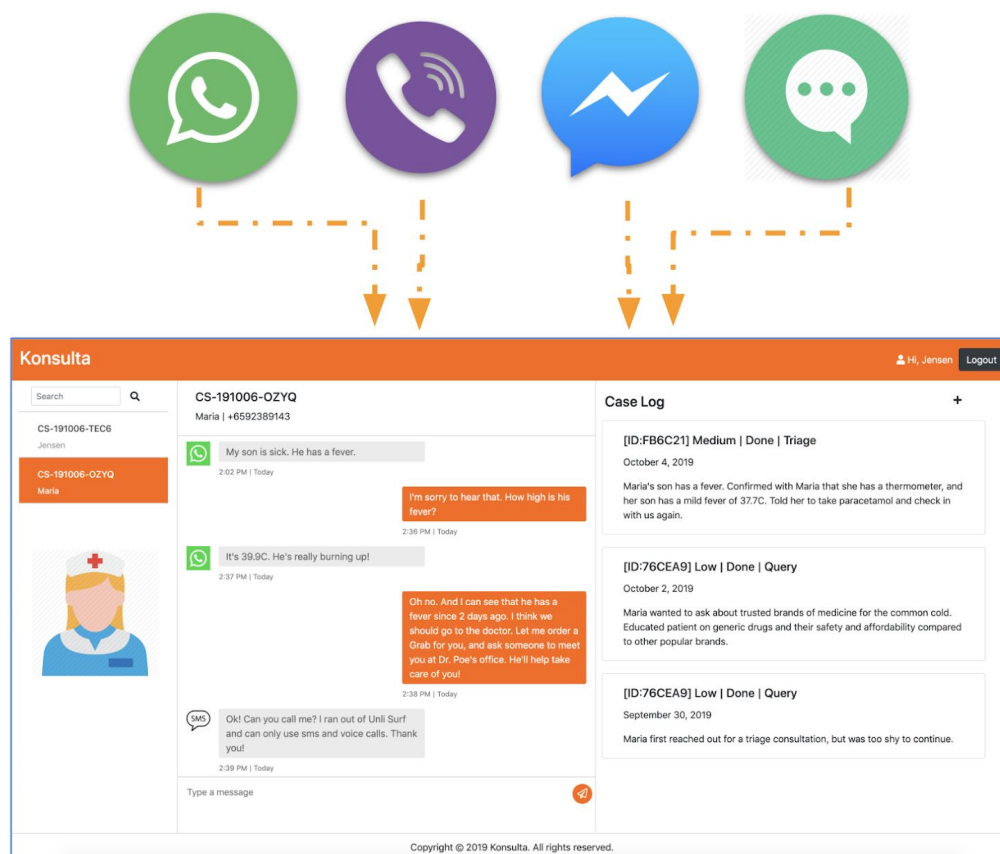
Even in urban poor communities, a mobile phone is considered a necessity rather than a luxury, and the top mobile networks in the country offer very cheap/unlimited SMS & data plans

targeted towards specific social networks or messaging apps. SMS, Viber, Facebook Messenger, and WhatsApp are the 4 of the most popular messaging channels in the Philippines.

Konsulta aims to drive down opportunity cost by leveraging messaging channels that the urban poor are already using; and through that, connect them to the unified omnichannel triage platform manned by staff, partners, and volunteers.

Healthcare Access

Konsulta offers multiple layers of healthcare access:
- **Automated healthcare database** that can be accessed simply by messaging. Chatbot/AI can be used to provide this first level of information.
- **Manned chat** where users can talk to staff for real-time triaging of potential high-risk health issues.
- Once channels are established with a user, Konsulta can also be used to **push information & alerts** to communities, e.g. dengue alerts, or even non-healthcare related concerns like flood warnings.
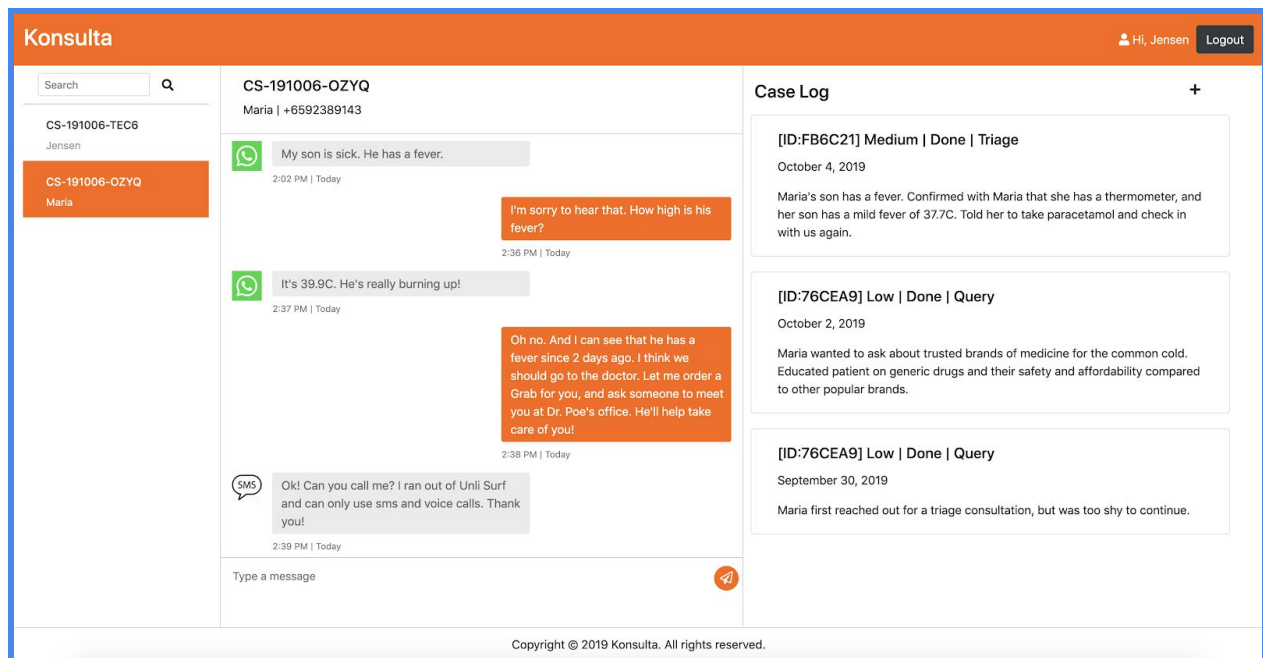

Triage chat example with case history and flexibility of communications

Unified User Data & Case Continuity

No matter which channel (or *channels*) users use to message, the platform will tie their messages into one persona and one unified case record to have continuity and build a history for that specific user.

One of the biggest challenges with urban poor communities is the transient nature of people that are part of these communities. With the ability to know what this specific person's history is, even if they are on-the-move, or physically hard to track, it will still allow for more effective help.

All this data can then be used to extend the platform and provide better ways to reach out and help people using it, such as being able to spot increases in disease cases, or provide a more transparent view into medicine costs & doctor's fees needed for individuals or communities, which can lead to more innovative fund-raising and donation programmes.

ALL FEEDS INTO THE SAME CASE HISTORY
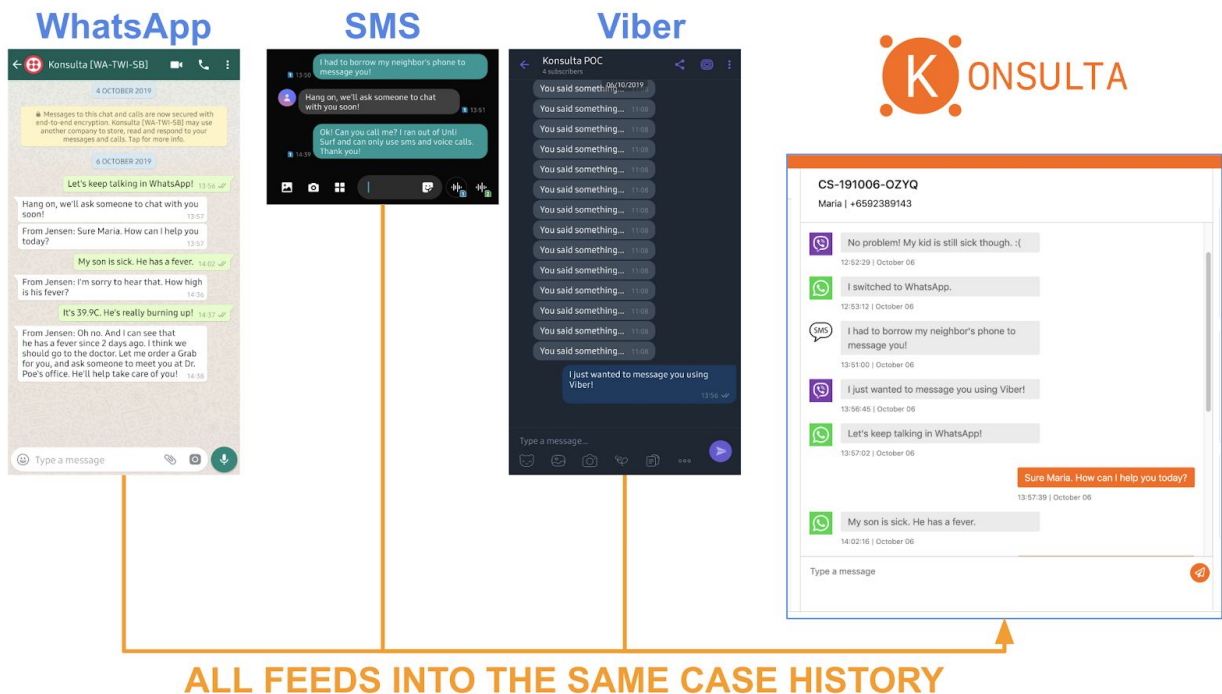
Value Proposition

For the urban poor:
- There is no need to download or use anything new, or go somewhere physically. What they already have is what they can use to access Konsulta.
- They can access general healthcare information quickly via a few simple messages, or even get alerts on pressing issues.
- If there is a more critical health issue, they can be quickly connected to human staff who can help triage their issues, and if need be, connect them to further medical assistance.

For the support team:
- Get a connected view into urban poor community needs and issues even off-site.
- Disseminate information via channels that are already in the hands of the urban poor.

- Provide timely and lower-cost assistance to those with pressing health issues, given most people will only access the automated healthcare database, and there's no need to go down to the area to provide assistance.
- Ensure continuity for each individual in need, no matter if the individual is transient, or if there is staff turnover.

For potential partners and sponsors:
- Have a real and real-time view of the most urgent healthcare needs that specific communities have, and through this, be able to prioritise programmes more effectively.
- Have an accurate and transparent view of the actual healthcare costs these urban poor communities need to shoulder, and potentially allow partners to share in the load.

Extending Konsulta

Crowd-funding & The Sharing Church

One of the key issues attached to the healthcare issue is: who is actually going to pay for all of this. A sample cost breakdown of a typical individual's case could be as follows:
- Doctor's fees - $$
- Cost of medicine - $$$
- Operating expenses (staff & platform) - $
- Other incidental fees (e.g. booking a Grab for the patient) - $

Konsulta as a platform will be well-equipped to provide the sort of actionable data (in this case, accurate costing) that can be used in fundraising campaigns.

Konsulta
Social Funding

16	**158**	**78**
Critical Cases Requiring Funding	Days Till Doctors Funds Run Out	Days Till Medicine Funds Run Out

297 ↓ Open Cases Right Now

1,178 ↑ Total Cases in the Last 3 Months

739 ↓ Individual Cases Requiring Funding

589 ↑ Individuals Engaged in the Last 3 Months

459 ↑ Prescriptions Given in the Last 3 Months

17k ↑ Spent for Medicine in the Last 3 Months

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Donate to General Funds

Donate to Individual Cases

Sponsor a Community

Each video consultation with a doctor costs P150.00.
In the past 3 months, there has been 6,354 consultations done.
This is a total cost of P953,100.00.
The Doctors' Consultation Funds currently have P1,670,841.00.
We can continue to give free consultation for 5 months and 8 days.

Donate to the Doctors' Consultation Funds

Every hour of staff work costs P40.00.
In the past 3 months, 934 hours has been spent by staff.
This is a total cost of P37,360.00.
The Operations Funds currently have P24,541.00.
We can continue to operate for 1 months and 28 days.

Donate to the Operations Funds

In the past 3 months, 3,543 prescriptions have been made.
This is a total cost of P1,456,065.00 with an average cost of P411.00.
The Medicine Funds currently have P1,307,912.00.
We can continue providing free medicine for 2 months and 18 days.

Donate to the Medicine Funds

Sample dashboards of the kinds of data the platform can provide

There are a lot of crowd-funding models we can adopt. One such crowd-funding model is a "cooperative", where members of a donor community can take turns to offer financial support to corresponding urban poor communities in need. One of the most suitable communities we can tap are churches in Singapore, who are especially built for community-based sponsorship.

The battlecry could be: **every believer a sponsor**.

Konsulta
Social Funding

ABC Church (Always 'Bout Christ)

Sponsors: 24
Communities Sponsored: 2
People in the Communities: 239
Monthly Capacity: S$2,345.00
Current Usage: S$1,253.35

53%

53% of monthly capacity used

68 ↑ Cases Sponsored in the Last Month

49 ↓ Individuals Helped in the Last Month

97 ↑ Coffees Given Up in the Last Month

Sponsors Queue

Queue	Name	Monthly Sponsorship Capacity	Current Monthly Usage	Coffees Sacrificed This Month
1	John Smith	S$100.00	S$34.75	
2	Emilio Bonifacio	S$50.00	S$17.93	
3	Jane Doe	S$200.00	S$126.38	
4	Jose Rizal	S$120.00	S$74.75	
5	Maria Clara	S$20.00	S$9.35	

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Sponsorship Cases

Case Date	Patient Name	Diagnosis	Result	Total Cost	Sponsors
05/10/2019 17:32:57	Juan Flavier	Fever	Medicine Prescription	S$54.50	Brian Tan
05/10/2019 13:45:37	Milagros Asuncion	Cough	Medicine Prescription	S$29.89	Juan Deoferio
05/10/2019 10:12:37	Maliksi Dela Cruz	Tuberculosis	Medicine Prescription	S$78.50	Roy Tang, Lizbeth Garcia
05/10/2019 08:21:04	Amor Palmas	Dengue Fever	Delivered to Hospital	S$184.21	James Smith, Jose Rizal, M...
05/09/2019 19:42:57	Maricar Sanchez	Fever	Medicine Prescription	S$48.55	John Doe

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Social funding dashboard accessible to ABC Church members

MyDoc: Telehealth & Video Consultation

One of the obvious partnerships for a platform like this is the rise of telehealth and video consultation services. Our partnering organisation, World Vision, does community integration activities (e.g. regular visits) during programme periods, and it would be a convenient delivery vehicle for iPads or other portable devices set up with a telehealth service such as MyDoc.

MyDoc could be integrated with the Konsulta platform so that case records in both platforms can be synced up and unified. MyDoc would be a great solution for regularly-scheduled community outreach, to function as a sort of medical mission, partnering with interested local doctors.

Scaling Beyond Cebu & Healthcare

The omnichannel triage platform and the unified case history and data transparency it can provide are scalable beyond just this specific problem statement.

Transient and urban poor communities elsewhere in the world that lack access to basic information and first responder resources can benefit from a platform such as this. The data transparency that this platform provides can benefit those organisations working to better the support they can provide to their attached communities.

Challenges & Limitations

- Remote consultations may only work with non time-sensitive and life-threatening situations. Severe cases that require hospitalisation and treatment will still have to be dealt with outside the platform.
- There will be certain services only licensed medical professionals are able to provide, though first-level responders may be trained laypeople.
- This platform will still not be able to resolve the main issue of understaffed facilities and overworked doctors. However, we aim to increase the scope of healthcare from public to private practices.
- Patients without registered addresses or a registered identity will be able to have case histories on the platform, but may still encounter challenges in cost (ineligible for public healthcare) and logistics (e.g. picking up medicines).

Impact

We can sum up the impact we envision Konsulta to have with the following 4 words inspired by ACTS:

- **ACCESSIBLE** - The platform aims to be as low-cost and convenient as possible, supporting all the messaging channels that the community already has access to, so that they are immediately "connected" to the platform.
- **CHURCH-DRIVEN** - We believe the church has a unique capacity to give and provide sponsorship to these communities, and that our solution can maximise the impact of the church in addressing community needs.
- **TRANSPARENT** - The platform aims to be data-driven and provide as much data as possible to World Vision and partnering organisations so that effective policies and programmes can be created and prioritised based on real community needs.
- **SCALABLE** - The platform aims to do as much as possible via as little resources as possible. It can be made flexible enough to be used in other problem statements and communities of similar nature (transient, low-income, with high opportunity costs).

Team Konsulta

Team Konsulta is:

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- Zabdiel Laurend Tosadu

Source code and public documentation is at: https://github.com/jenoosia/hack2019