Alison, Connor, Eric, Lu and Zaid

Alison, Connor, Eric, Lu and Zaid


Less than 20% of adults are vaccinated.
There are 3.5 million unvaccinated adults.

Economic impact due to lost wages and treatment costs:

$200M

Vaccination System

- Robust public insurance
- $8 million fund for vaccinations
- Mandatory childhood vaccinations

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A co-worker is hospitalized for **dengue fever**.

- A vaccine-preventable disease
- Affects 390 million+ people worldwide[1]

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Is there a way you can...

- Be **aware** of upcoming preventable diseases

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Is there a way you can...

- Be **aware** of upcoming preventable diseases
- Know **where** to take vaccines

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Is there a way you can...

- Be **aware** of upcoming preventable diseases
- Know **where** to take vaccines
- Easily **access** information on-the-go

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Now introducing...

VacciNow

Text “HELLO” to 289-813-2193

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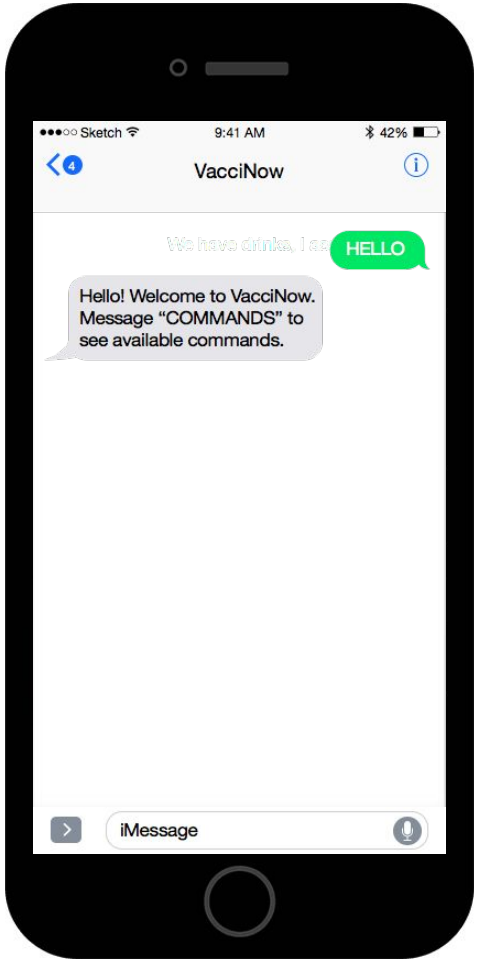
Text Commands



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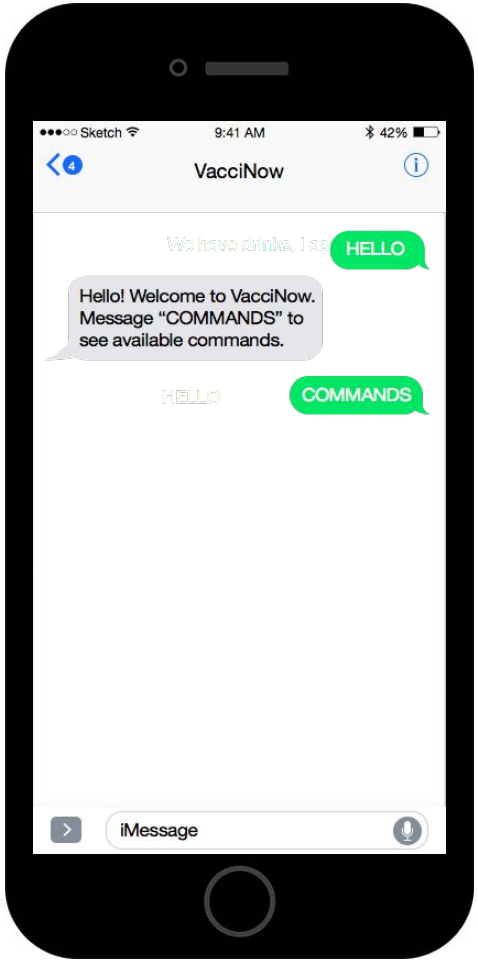

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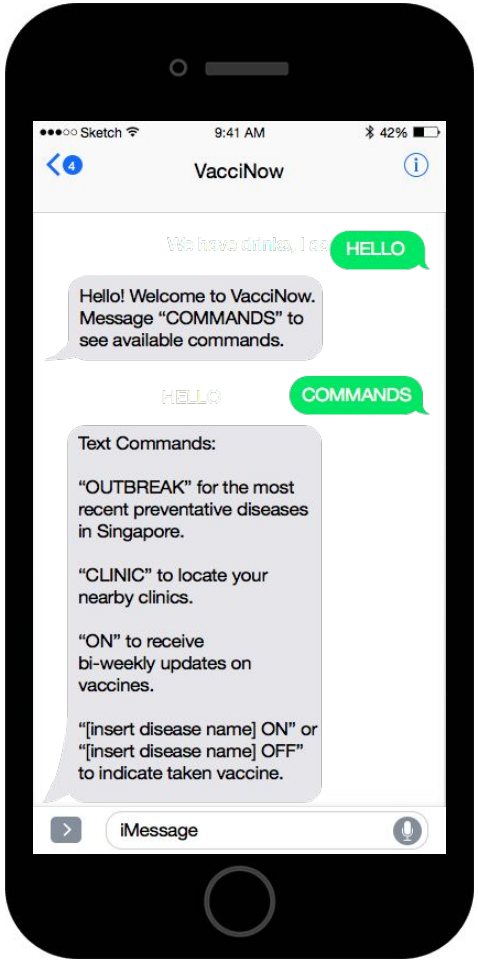

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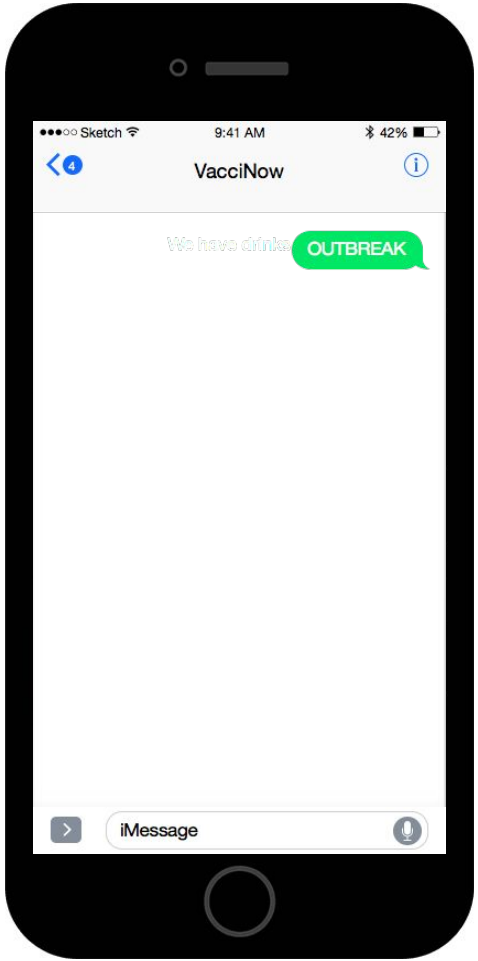
Vaccines Recommended



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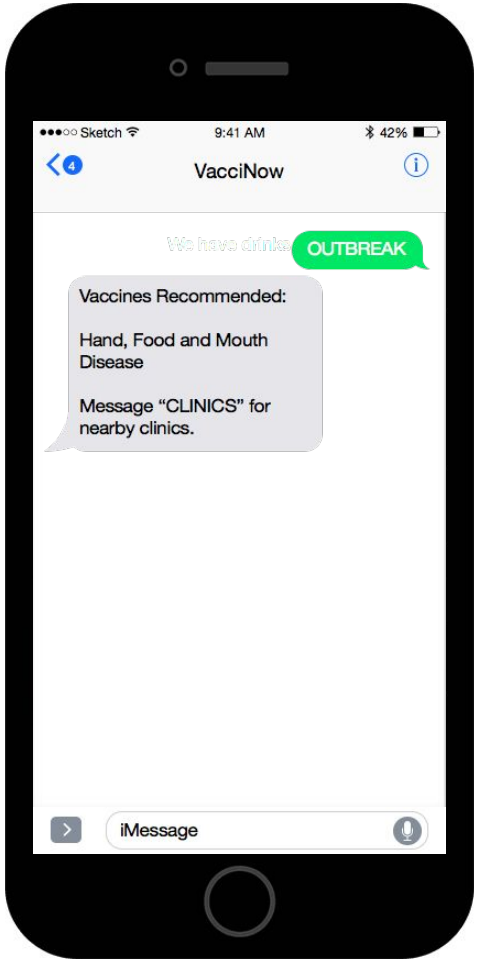
Vaccines Recommended



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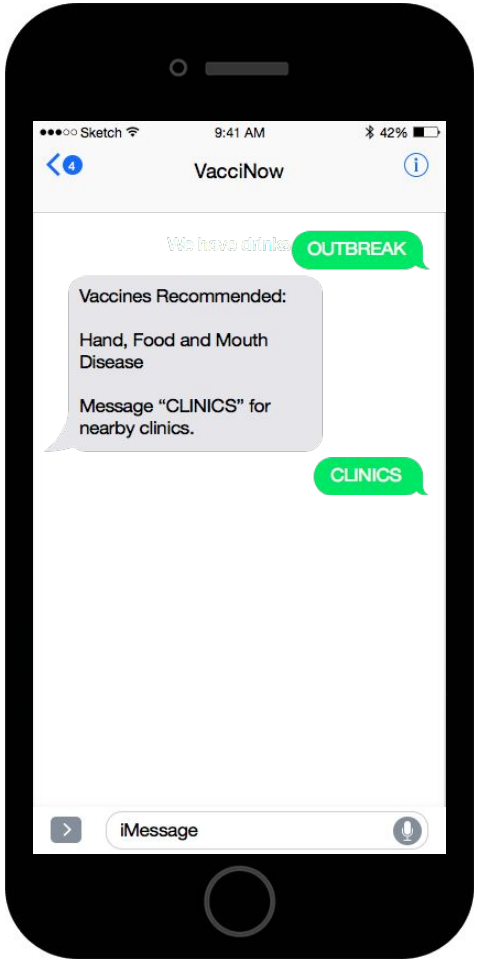
Clinic Locations



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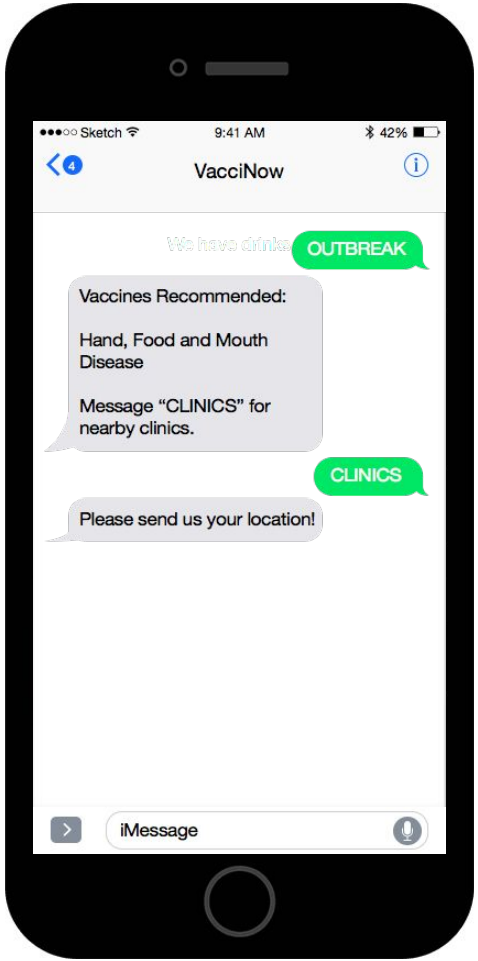
Clinic Locations



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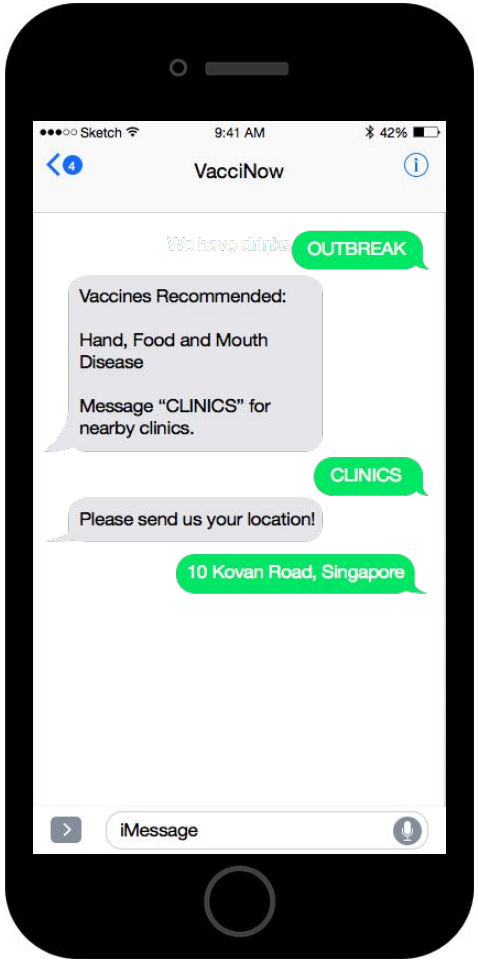
Clinic Locations



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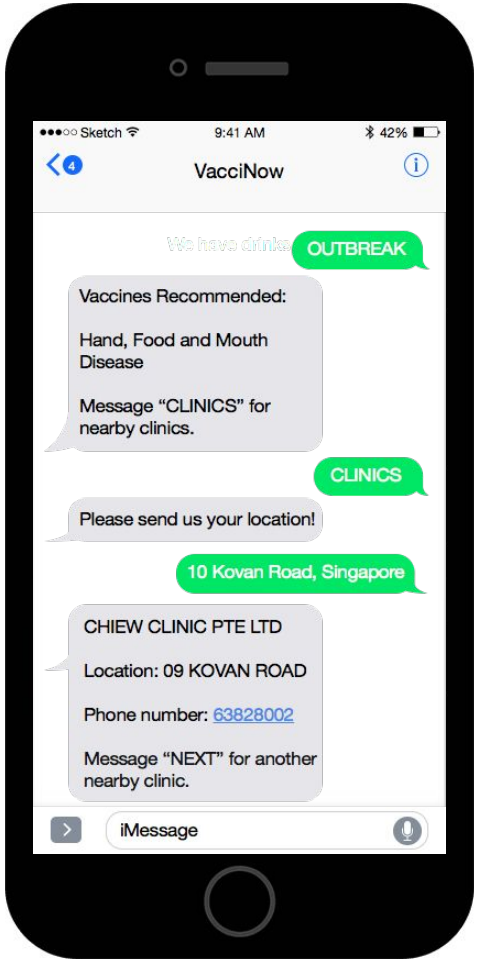
Clinic Locations



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Clinic Locations

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Clinic Locations

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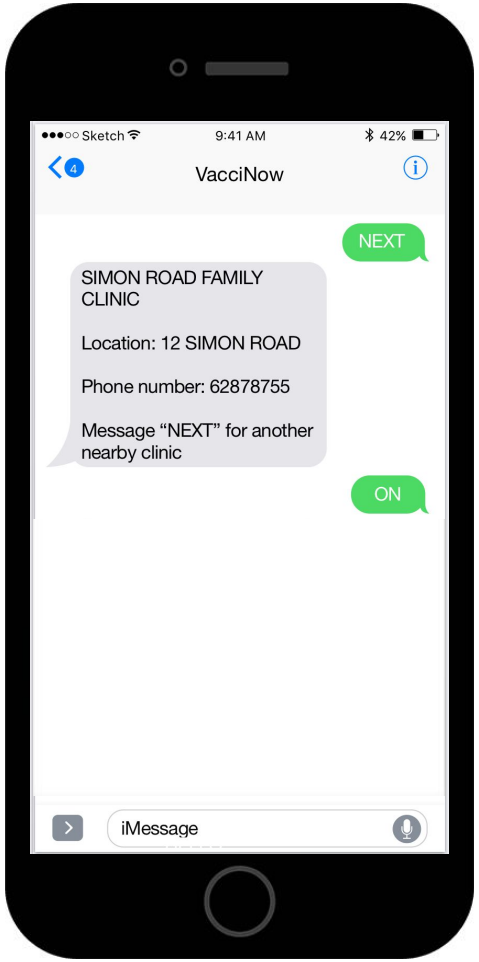
Weekly Notifications



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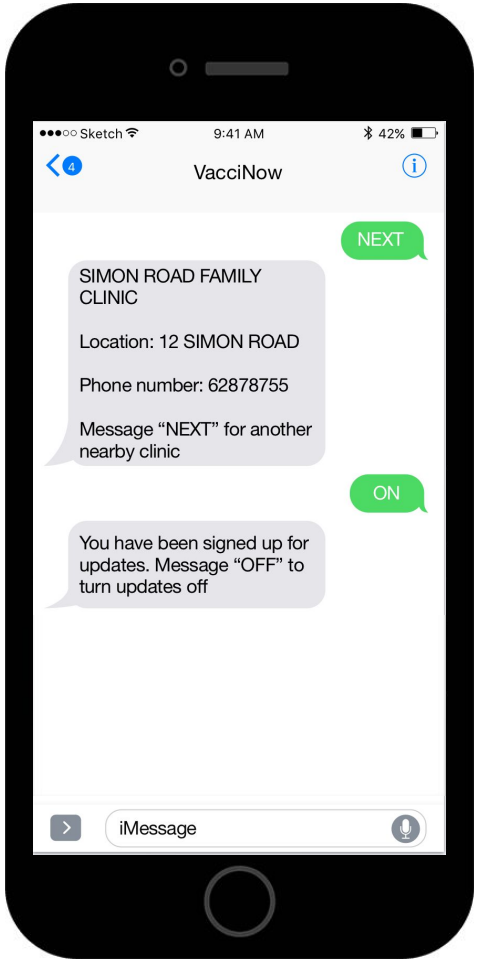
Weekly Notifications



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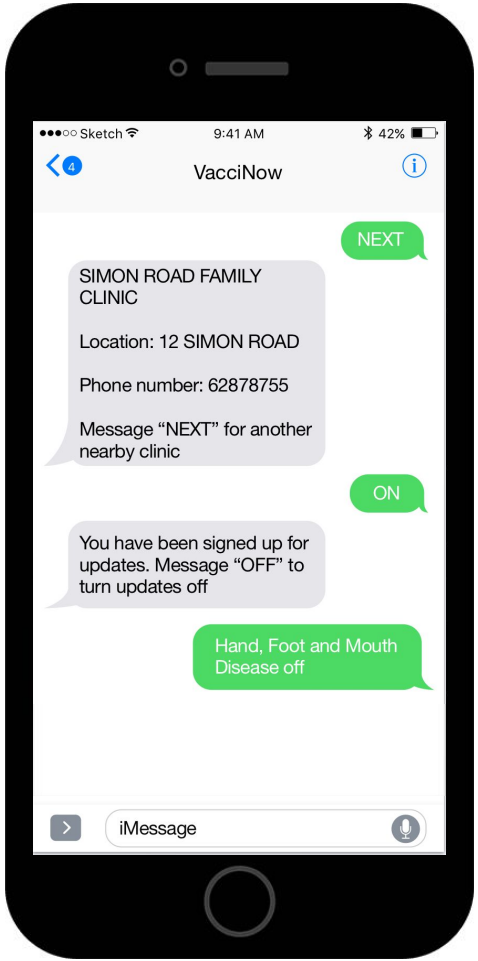
Weekly Notifications



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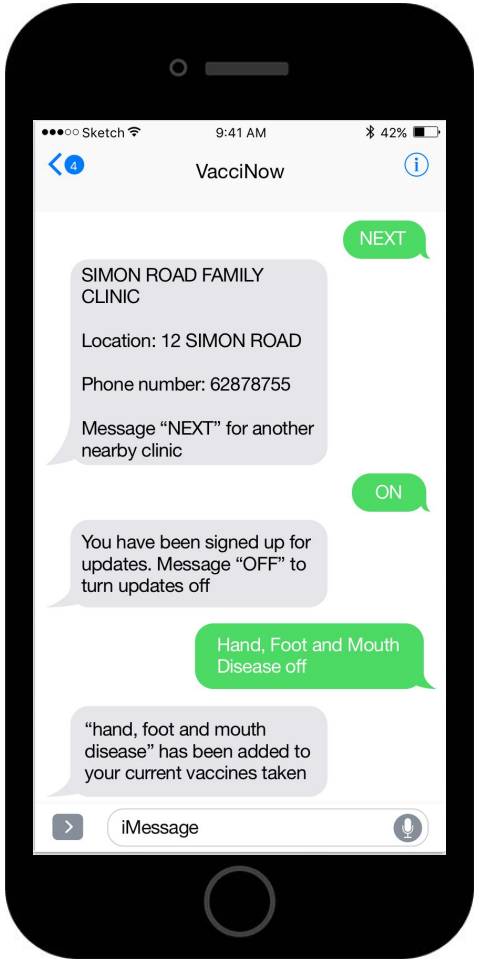
Weekly Notifications



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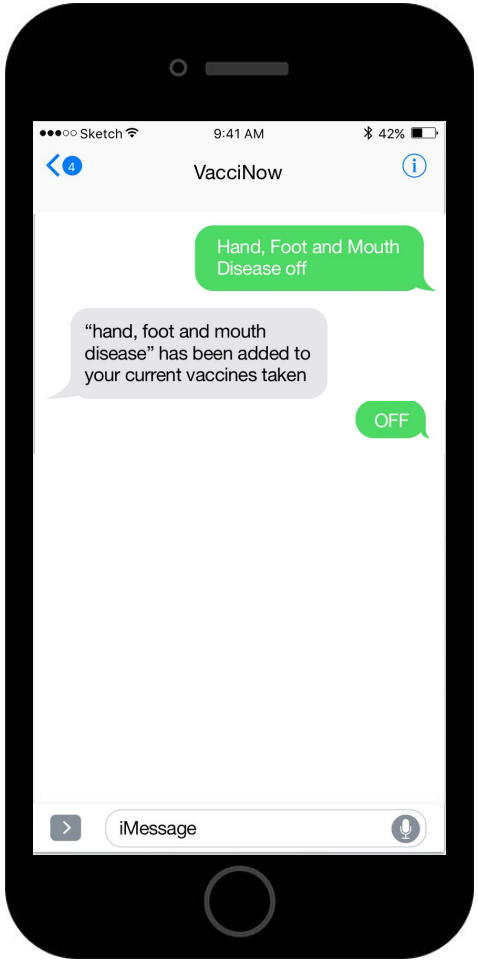
Weekly Notifications



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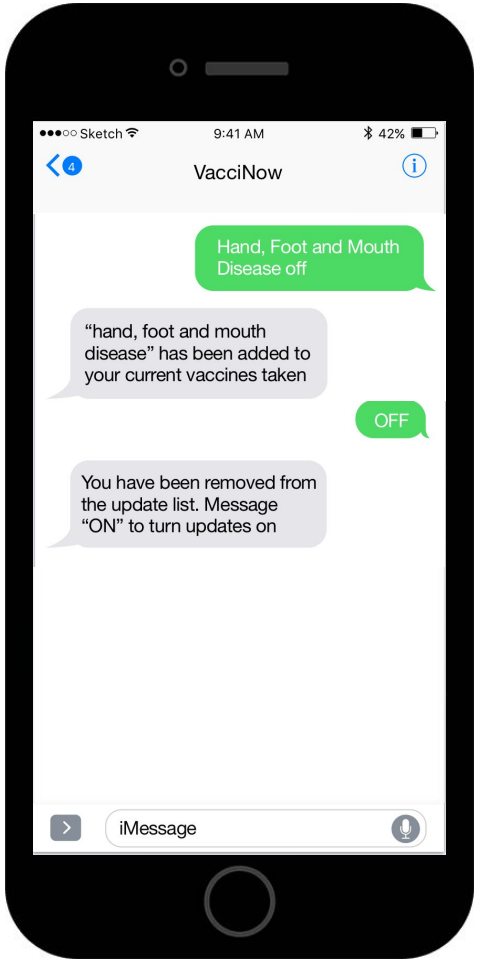
Weekly Notifications



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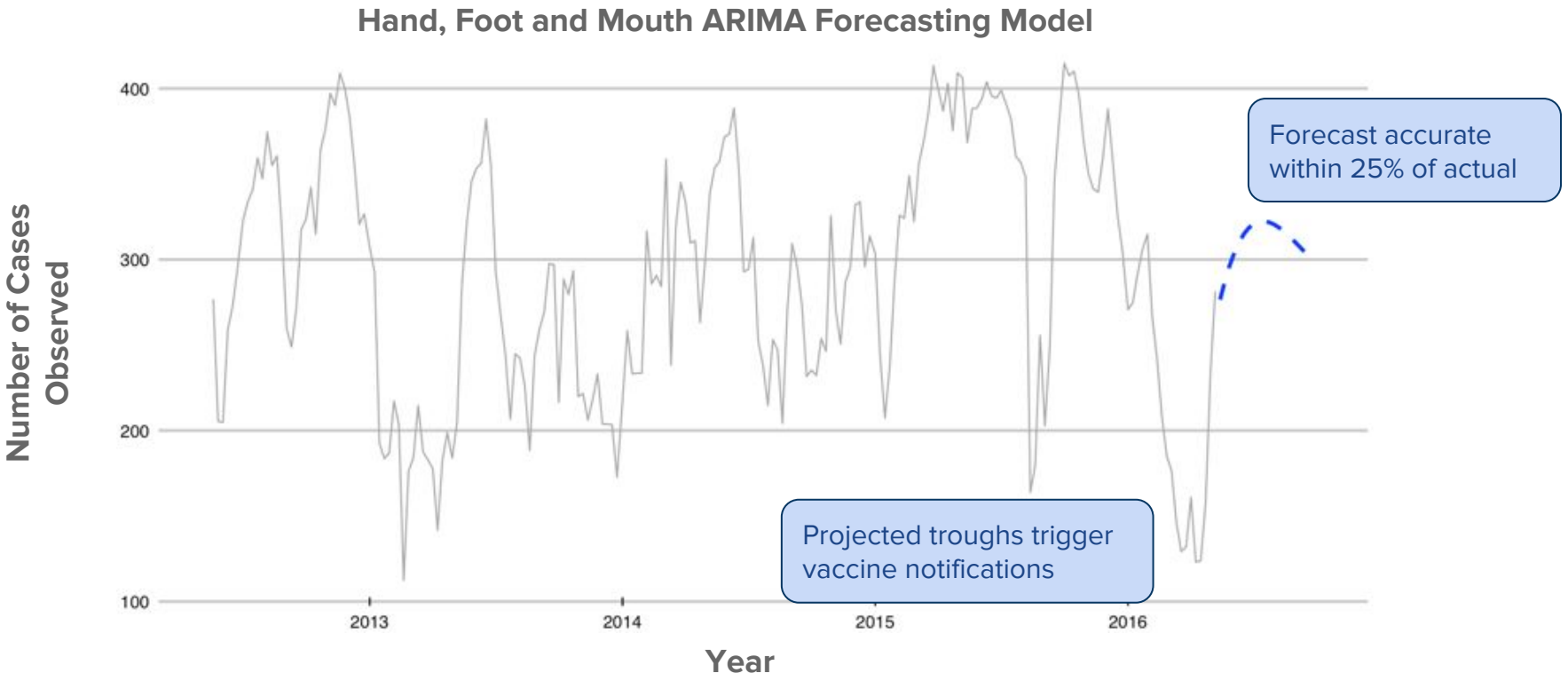
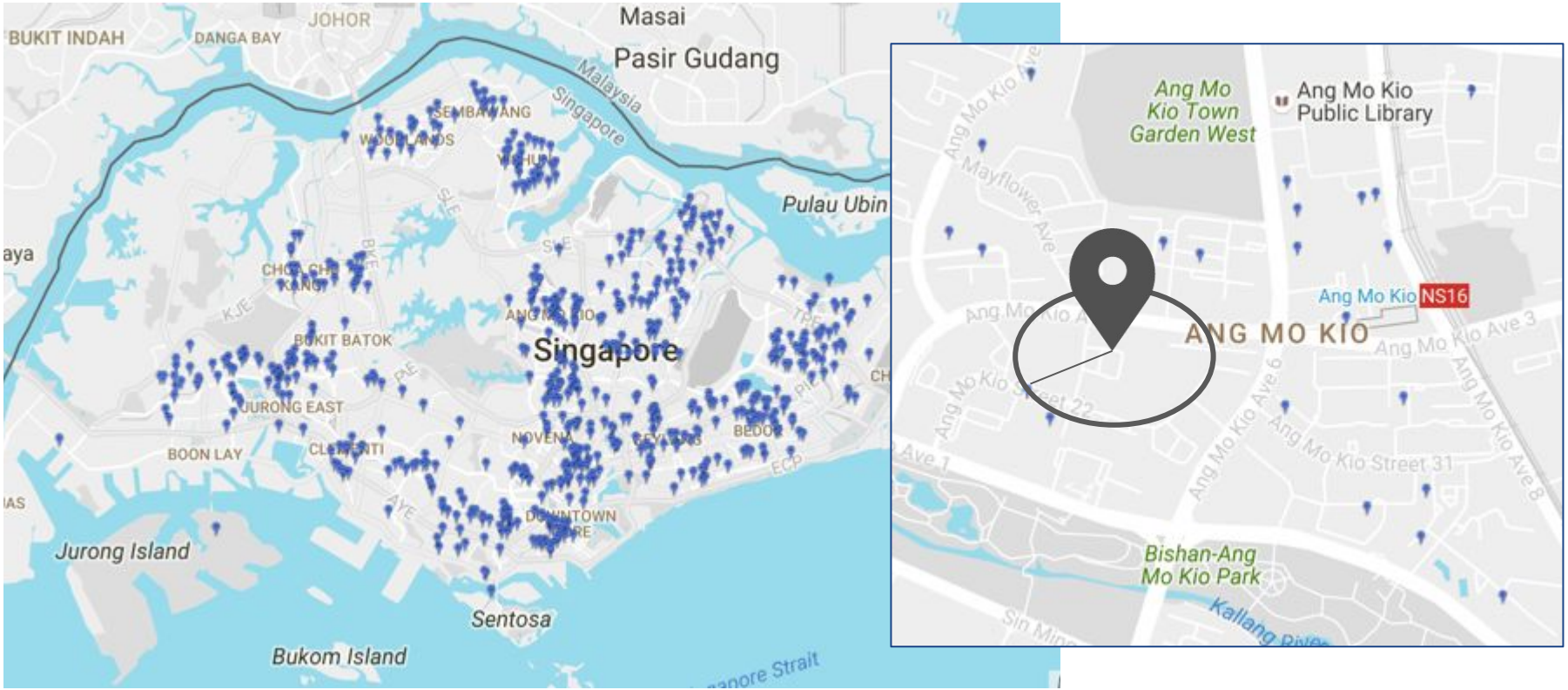
Outbreak Predictive Model



Mapping Health Clinics



Key Performance Indicators

1. **Direct Economic Impact**
   Cost to treat preventable illnesses.

2. **Indirect Economic Impact**
   Lost productivity from preventable illnesses.

3. **Health Quality Impact**
   Acute treatment patients displaced by patients with preventable illnesses.

1. Direct Economic Impact

Cost to treat preventable illnesses

= Cases per Year * (Treatment Cost per Case - Vaccine Cost)

Preventable Disease	Vaccine Cost (CAD)	Treatment Cost (CAD)	Cases per Year (2015)	Total Cost (CAD)
Dengue Fever	$22 [4]	$3,560.00 [7]	16,000 [8]	$57 million
Pneumococcal	$150 [5]	$2,540.00 [8]	12,000 [8]	$30 million
Hand, Foot and Mouth Disease	$75 [6]	$250.00 [9]	16,000 [9]	$4 million
Total				**$91 million**

2. Indirect Economic Impact

Indirect economic impact

= Cases per Year * (GDP per Capita / 365) * Recovery Time

Preventable Disease	Recovery Time	Lost Wages (CAD)	Cases (2015)	Total Wage Impact (2015, CAD)
Dengue Fever	7 days [1]	$1352.85 [11]	16,000 [8]	$21 million
Pneumococcal	10 days [2]	$1932.64 [11]	12,000 [8]	$23 million
Hand, Foot and Mouth Disease	10 days [3]	$1932.64 [11]	16,000 [9]	$31 million
Total				**$75 million**

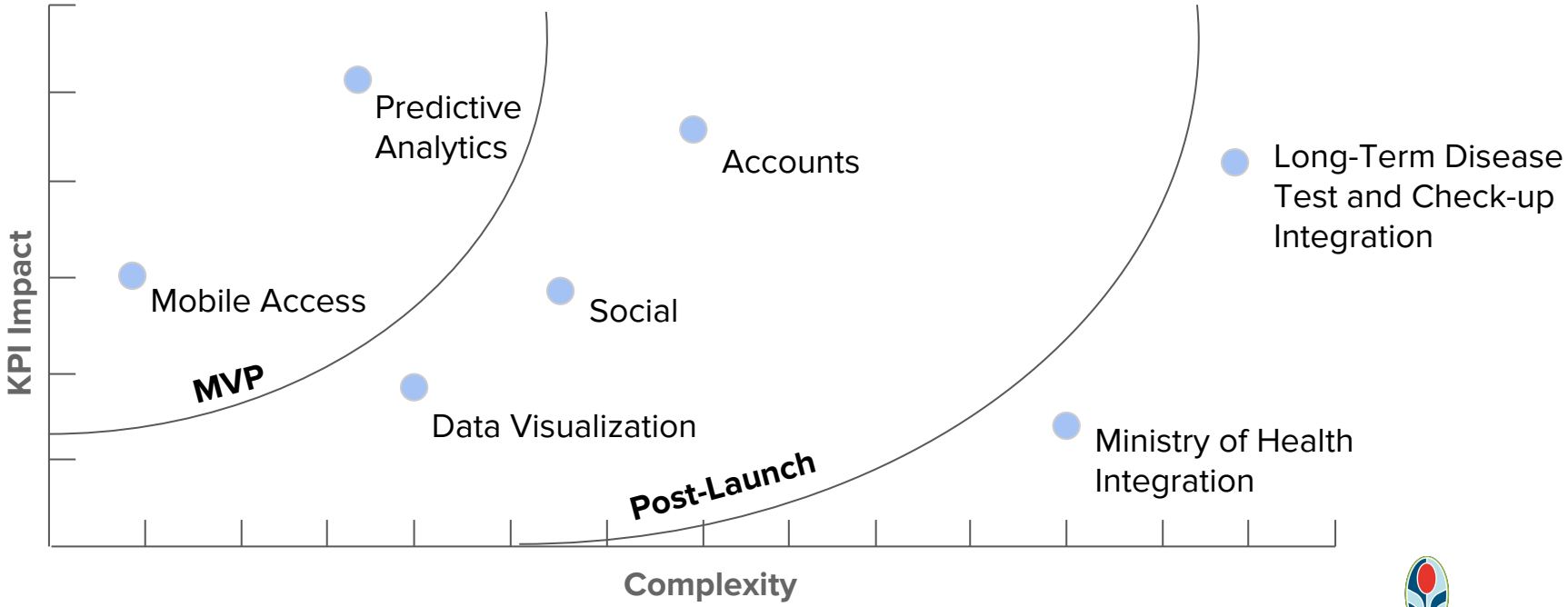
3. Health Quality Impact

Health Quality Impact

= Cases per Year * Recovery Time * (% recovery time spent in hospital)

Preventable Disease	**Recovery Time**	**Cases per Year (2015)**	**Hospital Beds Displaced (bed-days)**
Dengue Fever	7 days [1]	16,000 [8]	56,000
Pneumococcal	10 days [2]	12,000 [8]	60,000
Hand, Foot and Mouth Disease	10 days [3]	16,000 [9]	80,000
Total			**96,000**

Next Steps: Impact V.S. Complexity



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Appendix

1. http://www.webmd.com/a-to-z-guides/dengue-fever-reference#1; http://www.who.int/mediacentre/factsheets/fs117/en/
2. http://www.medicalnewstoday.com/info/pneumococcal-disease; http://www.nhs.uk/conditions/Rubella/Pages/Symptoms.aspx
3. http://www.cdc.gov/meningitis/viral.html; http://www.immunize.org/catg.d/p4220.pdf
4. http://www.immunize.org/catg.d/p4220.pdf
5. http://www.drgreene.com/articles/mumps/
6. http://www.cdc.gov/pertussis/about/signs-symptoms.html
7. http://www.cdc.gov/hepatitis/hav/afaq.htm#howLong
8. https://www.moh.gov.sg/content/moh_web/home/costs_and_financing/hospital-charges/Total-Hospital-Bills-By-condition-procedure.html
9. http://www.straitstimes.com/singapore/health/child-caught-hfmd-it-could-cost-family-1200
10. http://www.dengue.gov.sg/
11. https://www.cia.gov/library/publications/the-world-factbook/geos/sn.html

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