



FLU IN THE PHILIPPINES

Insights into Perception and Action on Vaccination

Authors

Dr. Lulu Bravo

Professor Emeritus University of the Philippines Manila
and Executive Director of the Philippine Foundation for Vaccination

Sophia Chen

Director, Market Access, Ipsos

Adrien Gras

Head of Market Access, Ipsos

Vanessa Orco Zerpa

Consulting Manager, Ipsos



FOREWORD BY PROF LULU BRAVO

We live in an era where prevention in the form of vaccination is possible for many infectious diseases, including influenza. However, in over 200 years of vaccine existence, the only disease known to be eradicated is smallpox.

In our densely populated cities, with our large families, infectious diseases such as influenza (flu) are easily transmitted, contributing to disease outbreaks. Even those living in rural areas, who live their whole lives far from urban or densely populated areas, cannot be complacent – infectious diseases know no boundaries.

Prevention is the only answer – between 2005 and 2010, the Philippines had no deaths attributed to measles because we enjoyed a high vaccination coverage rate; today, we have recurring outbreaks due to vaccination complacency, fear and distrust.

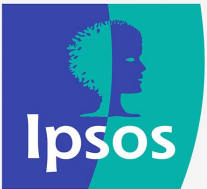
Over 480,000 contract influenza annually and there is limited data on our national vaccination coverage rate. In 2016, the Philippines Department of Health (DOH) ranked influenza as the 5th largest cause of morbidity, affecting the population more than other health threats such as tuberculosis, diarrhoea and dengue.

This is a clear indication that there is a great deal to be done by all public health stakeholders.

The data gathered in this paper, which identifies the progress that has been made and the areas where weaknesses remain, is an important step for us to identify concrete steps for improvement so that we can formulate more effective strategies to protect our citizens from influenza.

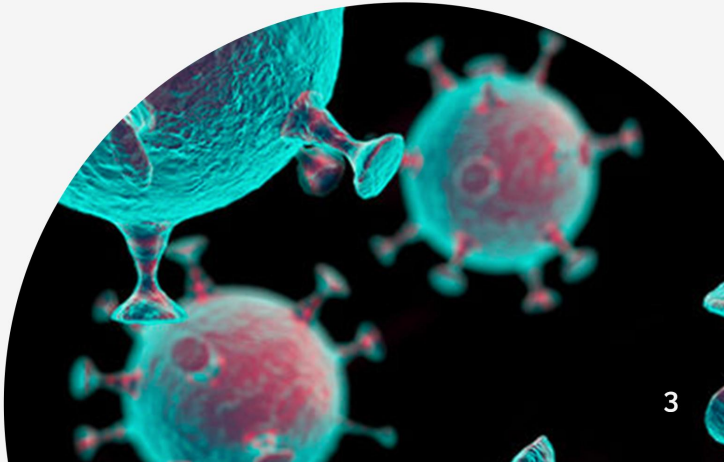
Dr Lulu Bravo

Professor Emeritus University of the Philippines Manila and
Executive Director of the Philippine Foundation for Vaccination



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Introduction & Objectives

Influenza (flu) vaccination has been available since the 1940s yet, in many countries across the globe, misperceptions, poor understanding, insufficient access, and other challenges prevent many individuals from protecting themselves against a virus that is a global threat.

According to the World Health Organization (WHO)

Estimated 1 billion cases influenza occur annually

3-5 Million

Severe cases
Resulting in hundreds of thousands of influenza-related respiratory deaths

In developing nations, the full impact of influenza is not fully known, but research estimates that 99% of deaths in children under 5 years of age with influenza-related lower respiratory tract infections occur in developing countries.

To gain a deeper understanding of the prevailing attitudes, perceptions and burden surrounding influenza and influenza vaccinations in several South East Asian countries, including Philippines, Ipsos conducted a series of studies between February and May 2019.

This paper aims to:

- Identify evidence of influenza impact and vaccination benefit in Philippines and several neighbouring countries;
- Understand perception of influenza among local experts, practising doctors, and the general population;
- Propose actionable recommendations to reduce the impact of influenza and improve influenza vaccination rates especially among high-risk populations such as children and the elderly

SECONDARY RESEARCH

Methodology

To enhance the relevance of the studies and provide guidance for each discussion and/interview, secondary research on the perception of influenza in the Philippines was conducted covering the following areas:

- Burden of Influenza
- Value of Influenza vaccine
- High-risk groups for (flu) vaccination in Philippines
- Attitude & habits, drivers & barriers to (influenza) vaccination
- Current influenza vaccination rates
- Current influenza vaccination policies
- Implications of not taking Influenza vaccine on health & economy
- Strategies to increase influenza vaccination rates

Sources included global and regional healthcare bodies, academic and commercial literature and news articles.



PRIMARY RESEARCH

Focus Group Discussions & In-Depth Interviews

Focus group discussions (FGDs) organised in Manila gathered information from stakeholders, selected to represent at-risk groups. With a moderator guiding each 2-hour discussion, data was collected to reveal attitudes, perceptions and habits concerning influenza vaccinations which encompassed personal, financial and cultural factors.

FGDs were organised for consumers and healthcare professionals while hour-long in-depth interviews (IDIs) were organised with local experts:



Dr. Lulu Bravo

Professor of Paediatric Infectious and Tropical Diseases at the College of Medicine; President of the Immunization Partners in Asia Pacific (IPAP); Executive Director of the International Society of Tropical Paediatrics



Dr. Salvacion Gatchalian

Paediatrician with a sub-specialty in infectious diseases, Associate Professor at University of the Philippines College of Medicine; Consultant with the Research Institute for Tropical Medicine; President of Philippine Paediatric Society



Dr. Imelda Mateo

Pulmonologist; Medical Director of Amang Rodriguez Memorial Medical Center

For details on criteria for participation and focus areas, please refer to Appendix 1.

Interpretation of Research Results

As screener criteria was strictly applied to the participants, any respondent data and findings from this whitepaper should be interpreted as limited to the populations tested. Moreover, due to the limitations of qualitative research, any figures presented any figures presented should be considered directional insights and may not be conclusive in nature.

The research conducted in this whitepaper was sponsored by Sanofi. The authors conducted the research for Sanofi in return for a consultancy fee and has no conflicts of interest to report

RESULTS AND DISCUSSION

The Impact of Influenza



The Global Burden of Influenza

One hundred years ago, the 1918-1919 influenza pandemic took an estimated toll of up to 50 million deaths. While such a figure seems unimaginable today, with our arsenal of vaccines and anti-viral medicines, influenza continues to claim approximately 650,000 lives annually.



650,000

~10 times the number of the people killed by Hiroshima bomb

Who?

Those who are most at risk are children below 2 years; the elderly, especially those above 65 years; and those with compromised immune systems and/or respiratory diseases.

What Are The Risks?

Any individual can get infected with the influenza virus; in severe cases, it may require hospitalisation, worsen existing conditions, and lead to life-threatening complications such as pneumonia and heart failure.

The urgency of addressing influenza worldwide is best summed up by the World Health Organization (WHO), which has declared that "an influenza pandemic is an inevitable and very real threat to global health."

“ an influenza pandemic is an inevitable and very real threat to global health ”

From Global to Local

Commonly thought to be a “cold weather disease,” influenza affects all countries regardless of climate type. This misperception is particularly damaging as – unlike temperate climates with distinct flu seasons – tropical countries experience irregular outbreaks year-round. Tropical countries report a substantial number of cases, roughly 6% of all global annual cases or up to 64 million people in South East Asia alone every year. Of these, between 3.8 and 8.9 million result in pneumonia and hospitalisation.



6%

of all global cases or 64 million
caught flu in South East Asia



3.8 – 8.9 million

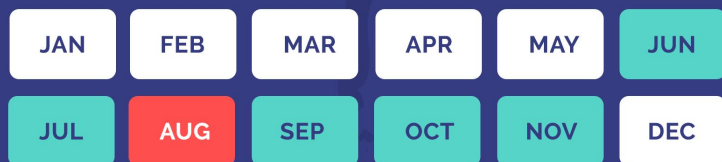
result in pneumonia
and hospitalization

Over 480,000 individuals

contract influenza annually in the Philippines

Influenza season

Highest number of cases between Jun-Nov and peak in Aug



In 2016, the Philippines Department of Health (DOH) ranked influenza as the 5th largest cause of morbidity, affecting the population more than other health threats such as tuberculosis, diarrhoea, and dengue.

Two of the highest-risk groups

which suffer higher influenza-related mortality rates than the rest of the Philippines population, are:



1

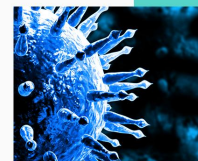
Children under the age of 5:

DOH data shows that children are the largest (around 30-40%) proportion of the Philippines population affected by influenza-like illness.

The Elderly

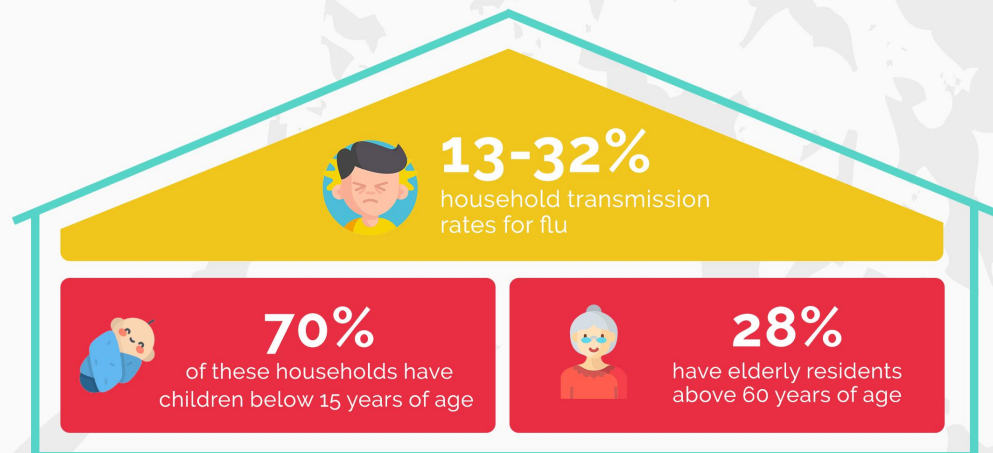
The Philippines Centre for Disease Control (CDC) reports that 50-70% of seasonal flu-related hospitalizations occur in citizens aged 65 or older.

2



“Influenza is easily transmitted to family members including those in high risk group as large households are the norm”

Multiple studies have shown that household transmission rates for influenza can be as high as 13 to 32%, with flu transmitting more aggressively among pre-schoolers and school-going children. This in turn places older persons at increased risk as many grandparents provide childcare for their grandchildren.



Flu's Financial Impact

The cost of treating influenza, including hospitalisation and other healthcare costs, is high. Discussions with consumers from different population sectors revealed that the cost of hospitalization alone can range from PHP 10,000 to 30,000 (US\$ 195 - 587) per episode. This excludes indirect costs such as transportation, loss of productivity due to missed days of work, or mortality, which can become a significant financial burden to the average Filipino family.

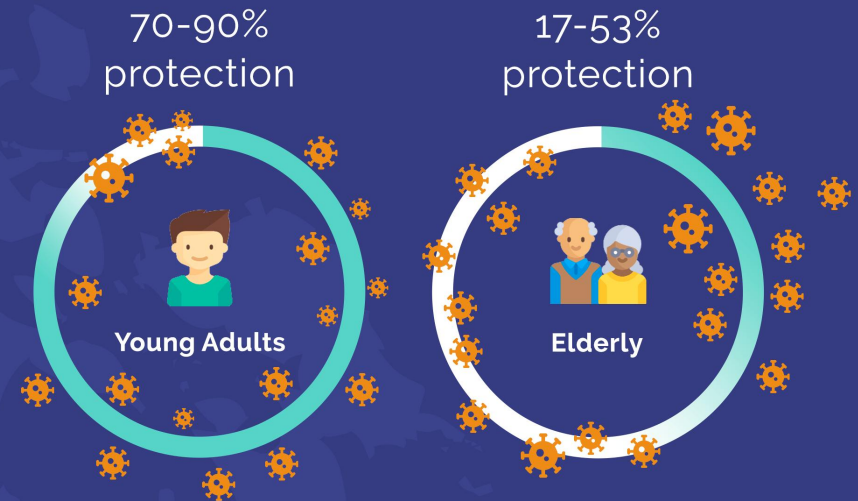
“**My child was hospitalised for four days; the cost of medication and being away from work came up to PHP30,000.**”

- Parents of young children and participants in focus group discussion



The Plan for (Influenza) Prevention

Vaccination is the most effective and proactive way to prevent influenza. Among immunised individuals who are infected, the risk of complications is also lower.



DATA FROM THE U.S. INDICATES
[Among those who have been vaccinated against influenza]

-25%

Number of episodes of upper respiratory and flu-like illnesses

-43%

in sick days due to upper respiratory illnesses

Although limited study has been conducted to evaluate cost savings of a comprehensive vaccination program in Southeast Asia, WHO indicates that flu vaccination can generate savings for individuals, families, employers and entire healthcare systems in both high and middle-income countries.

To capture the benefits of influenza immunisation

the Philippines Department of Health (DOH) has deployed several initiatives including stricter guidelines for prevention, improved funding for vaccinations, and more comprehensive data collection to better identify trends in Philippines.



Philippines DOH's Initiatives for Influenza Prevention



✓ Offer seasonal vaccinations

Since 2011, efforts have been made to make seasonal vaccinations available at all health centres.

In addition, the DOH launched a program as part of the Expanded Senior Citizen Act to provide free flu and pneumococcal vaccination to indigent senior citizens.



In 2019, 2 million doses
were made available to protect the indigent elderly population against influenza

✓ Advise guideline to prevent spreading of flu

DOH issues a public health advisory notice on influenza, advising citizens about the standard precautions and guidelines for self-imposed home quarantines for infected individuals to further curb the spread of the virus.

✓ Track influenza-like illness

DOH also tracks influenza-like illnesses nationwide and releases weekly status reports as WHO recommends methodical and regular surveillance. Consistent, long-term tracking provides valuable insights into transmission patterns, enables earlier detection among vulnerable groups, and provides guidance in the selection of seasonal influenza vaccines, with the aim of effectively minimising outbreaks.



In support of DOH initiatives, local medical associations are taking a proactive stance to improve influenza vaccination rates.

The Philippines Paediatric Society, Paediatric Infectious Society of the Philippines and Philippines Foundation for Vaccination jointly release yearly flu vaccination guidelines for specific categories. These schedules provide details on recommended dosage, frequency, side-effects, and precautions to optimise flu vaccination practice.



RECOMMENDATIONS



The Philippine Department of Health

Influenza vaccination preferably to be given to all anytime from February to June. **Young children, older adults, pregnant women, and people who have weakened immune systems** are highly susceptible to flu.



Philippine Pediatric Society, Pediatric Infectious Disease Society of the Philippines and Philippine Foundation for Vaccination

Trivalent/quadrivalent influenza vaccine to be injected annually directly into muscle or under skin to **children aged 6 months and above**.



Philippine Society for Microbiology and Infectious Diseases

All adults are recommended to get the annual flu vaccine most especially those with co-morbidities



Despite progress, many Filipinos remain unvaccinated

Focus group discussions showed that many Filipinos claim to understand the value and benefits of getting the influenza vaccination, especially those who have been vaccinated before. Despite this, many remain unvaccinated.

Similarly, healthcare professionals realise the value of influenza vaccination as their line of work exposes them to higher probability of contracting the virus. In the focus group with four healthcare professionals, all rated the value of the flu vaccination highly, either 9 or 10 (with 1 being 'not at all important' and 10 being 'very important').

8 barriers to influenza vaccination



1. Vaccination is not a priority; consumers are “too busy” to get vaccinated

Getting the family to the clinic is a challenge for parents busy with responsibilities at home and work; their busy schedules allow other things to take precedence over vaccination.

2. Consumers believe they are at low risk of contracting influenza

Some individuals feel they are in good health, leading to complacency as they believe that they are invincible. With vaccinations already a low priority, they are likely to remain unvaccinated.



3. Consumers, especially elderly, lack awareness of severity of influenza

Many Filipinos view “influenza” and “flu” as separate diseases, and perceive that influenza is severe while flu is not. This belief is particularly prevalent among the elderly, who represent most of the high-risk population. As a result, they are reluctant to accept that flu (influenza) can have severe consequences such as pneumonia and even death.

4. Consumers lack access to the influenza vaccine and/or are unaware that free vaccine is available for certain groups

Indigent elderly Filipinos who qualify for free flu vaccination may all not be aware that the vaccines are free and provided by the government. Only 30% of Filipinos are aware of the flu vaccine. Of those who are aware, about 36% have had a flu vaccination since they turned 60.

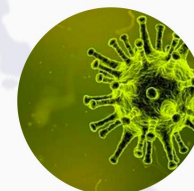


5. Vaccines can be “expensive” to some Filipino families

Vaccine prices range from PHP500 to PHP1500 (US\$9.8-29.4). With the average monthly household income of PHP22,000, the total cost to vaccinate an entire family can be a heavy financial burden, bearing in mind that influenza vaccinations need to be done annually.

6. Vaccines sometimes arrive too late for effective protection against the current strains

Delays of two or more months mean that vaccines are only available when the flu season has already set in and some members of the population may have already contracted the virus.



7. Limited supply of free, government-sponsored, vaccines are quickly exhausted

In recent years, barangays have experienced insufficient supply of influenza vaccines to cover the Health and Wellness Program for Senior Citizen.

8. Improper storage procedures may compromise the quality and efficacy of influenza vaccines

Healthcare professionals in the focus group stated that vaccines, especially in rural areas, may not be stored correctly by local hospitals and clinics, due to lack of infrastructure and training. This could render the vaccines ineffective in preventing infection and further reduce availability.



Strategic Steps to Improve Influenza Vaccination Rates in the Philippines

Addressing each of these impediments will improve vaccination rates across the Philippines, thus reducing the risk of infections and the corresponding complications that arise. To overcome the barriers, two key actions are required: educate and implement.

Educate



Instil awareness of influenza burden and benefits of influenza vaccination

Participants in the consumer focus groups said they would get vaccinated if they had greater knowledge of its benefits such as reducing the risk of flu complications and loss of income/productivity that would have a direct impact on their lives.

A comprehensive communications strategy to increase awareness about flu and address misperceptions would support effective influenza protection for the entire Filipino population.

Effective communication efforts should to aim to:



Instil understanding that flu and influenza are the same illness, with severe consequences



Dispel the idea that flu is a mild illness, especially among the at-risk population, and provide evidence of the severity and burden of disease



Demonstrate the full range of benefits of being vaccinated against influenza



Highlight influenza vaccines as a cost-effective measure which can result in savings for individuals, families, employers and entire healthcare systems.



Improve awareness of existing programmes

Elderly participants in the focus group discussions were unaware of the free influenza vaccination initiative. A regular announcement that influenza vaccines are available for the elderly would spark interest and demand among other segments of the population as well.



Empower and support healthcare professionals as champions for vaccination

Filipinos place high trust in their physicians and focus group participants stated they would be much more likely to get vaccination if their physician recommended that they do so.

Engaging and empowering healthcare professionals with information, will enable them to become effective advocates for prevention of influenza.

Healthcare professionals should start with the crucial step of receiving the vaccinations for themselves.

Implement



Establish clear and comprehensive DOH influenza prevention and treatment guide

While DOH and local experts recommend vaccination as the most effective form of prevention, there are no official guidelines to govern the administration of the vaccine. A guideline that details dosage, frequency, precautions, side effects and other important information would support healthcare professionals in ensuring the vaccine is administered safely, efficiently, and routinely.



Create a broader vaccination programme to include subsidies for all high-risk populations

Those in low-income, high-risk brackets are very unlikely to vaccinate unless subsidies are available for them. Among high-risk populations, subsidies could motivate more individuals to get vaccinated; an interviewed expert estimated that vaccination rates could range from 60-95% with the right subsidies.

“Vaccination for healthcare professionals must be one of the priorities, because they can transmit the disease to their patients.”

- Dr. Lulu Bravo

Paediatric immunization specialist



Improve access to the influenza vaccine especially in the public sector

Currently, only those who live within reasonable access to clinics have a chance of getting vaccinated. Improving vaccination rates will require setting up a network of healthcare providers capable of serving the high-risk populations, such as the elderly and those in remote areas via local health facilities and potentially mobile clinics.



Invest in accurate measurement of disease burden and vaccination coverage rates

Accurate tracking and timely data collection are essential for measuring influenza burden of disease, enabling policy makers to make informed decisions such as how to prioritise the allocation of resources.



The DOH influenza surveillance initiative provides a good foundation for data collection; however, it currently only tracks the direct health impact of influenza-like-illnesses (ILI). To measure influenza disease burden, surveillance could be expanded to track economic costs directly attributable to influenza and indirect financial impact such as absenteeism from work, secondary illnesses and other complications.

By getting a thorough understanding of vaccination rates and tracking influenza management efforts in Philippines, actions can be taken to ensure that the value of vaccine is being fully realised in practice.



Looking forward: Prevent, Control, Prepare

These three words that appear on the WHO Global Influenza Strategy 2019-2030 make it very clear that a well-coordinated, sufficiently-funded, and well-executed programme is necessary to mitigate the impact of the next flu pandemic, whenever and wherever it may strike.

The focus should be on prevention, and vaccination against influenza is the most effective way to prevent the spread of this disease. Government funded vaccination programmes have dramatically improved the outcomes of seasonal flu epidemics from a hundred years ago, when deaths would be counted in the millions.

The current influenza vaccination programme aimed at the elderly demonstrates that Philippines health authorities are committed to protecting vulnerable populations from this disease. The focus now should be on expanding current efforts to ensure that beneficiaries of current programmes are consistently receiving the vaccine, and as a next step, cover a broader range of the high-risk population.

A multi-stakeholder approach focused on educating the population on the risks of influenza and implementing programmes to expand access to the vaccine would effectively reduce the impact of flu on the health and well-being of Filipinos.



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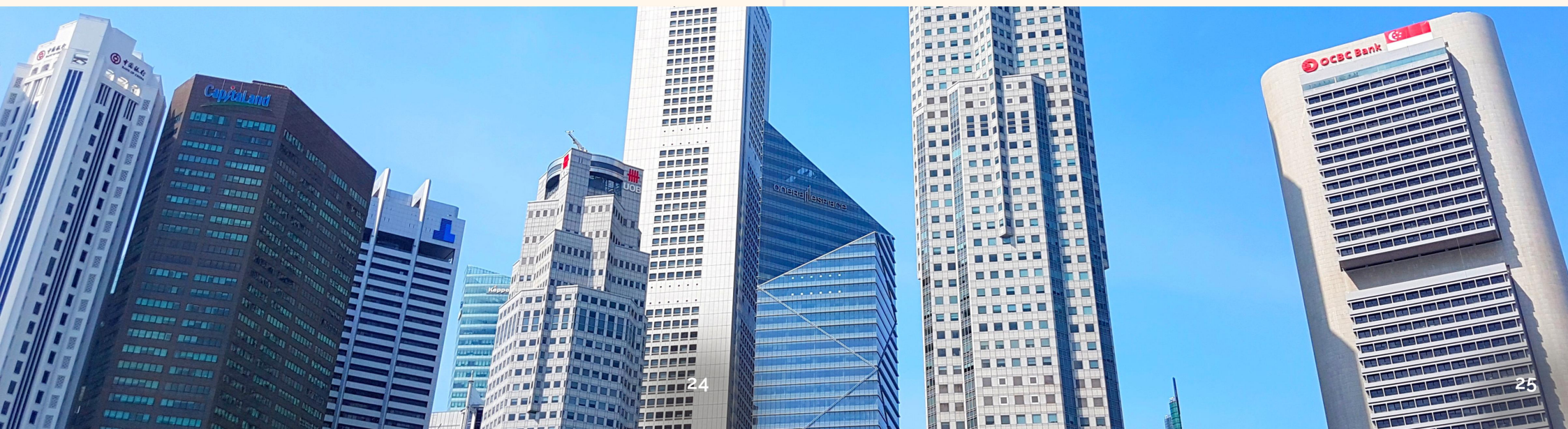
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**Ultimately, success comes down to a simple truth:
You act better when you are sure.**



APPENDIX

Appendix 1: Focus Group Discussions and In-Depth Interviews

Focus Group Discussion: Healthcare Professionals

Criteria	Focus Areas
<ul style="list-style-type: none"> Philippines citizens Specialists with 10-20 years' experience Seeing >30 patients per month; more than 5 each comprising those with diabetes mellitus, cardiovascular disease and geriatric Mixture of those who recommend/have received flu vaccine and those who have not 	<ol style="list-style-type: none"> Perception Toward Influenza & Flu Vaccination Process for Getting/Recommending Influenza Vaccination Drivers and Barriers for Flu Vaccination Key Messages That Would Improve Uptake of Influenza Vaccination - Achieving Lower Rates of Influenza Infection Maximise Flu Vaccination Acceptance: Receptivity toward various communication channel/ materials

Focus Group Discussion: Consumers (3 separate sessions comprising Parents with Young Children; Elderly; and Diabetes & Cardiovascular Patients)

Criteria	Focus Areas
<ul style="list-style-type: none"> Philippines citizens Mixture of those who have/have not received flu vaccine (For elderly) Above 60 years (For parents) At least one child <5 years 	<ol style="list-style-type: none"> Perception Toward Influenza & Flu Vaccination Process for Getting/Recommending Influenza Vaccination Drivers and Barriers for Flu Vaccination Key Messages That Would Improve Uptake of Influenza Vaccination - Achieving Lower Rates of Influenza Infection Maximise Flu Vaccination Acceptance: Receptivity toward various communication channel/ materials

In-Depth Interviews with Key Opinion Leaders (3 sessions involving influential experts in national/local immunization guideline development)

Criteria	Focus Areas
<ul style="list-style-type: none"> Specialists in infectious disease, paediatrics and pulmonology 	<ol style="list-style-type: none"> Burden of Influenza Disease Influenza Vaccine Perceptions and Value Influenza Vaccine Practice Strategies to Improve Influenza Vaccination Uptake

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