

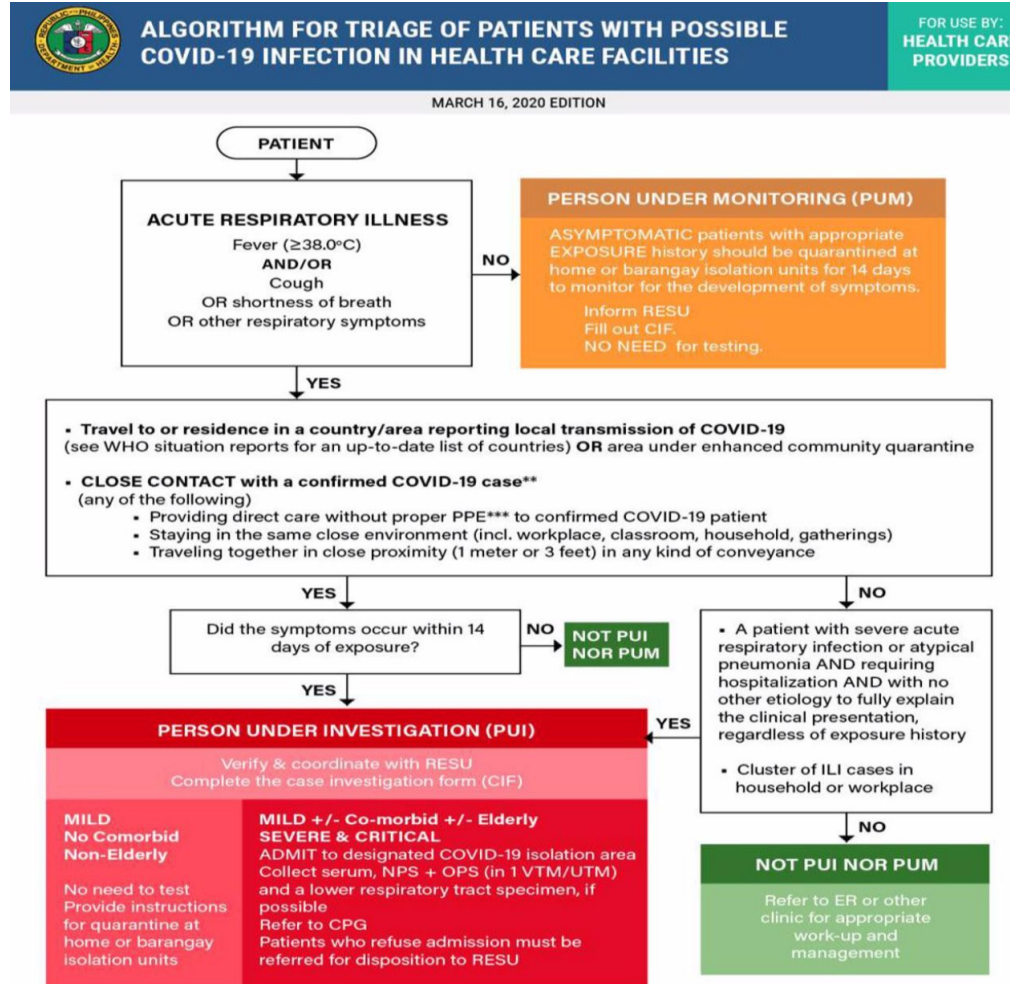
# How ICM has repositioned data collection/analysis in response to COVID-19



**JLI MEAL Hub - April 23, 2020**

Lincoln Lau, Daryn Joy Go, Hannah Ferrolino, Mia Choi

# Facebook Chatbot - COVID-19 assessment



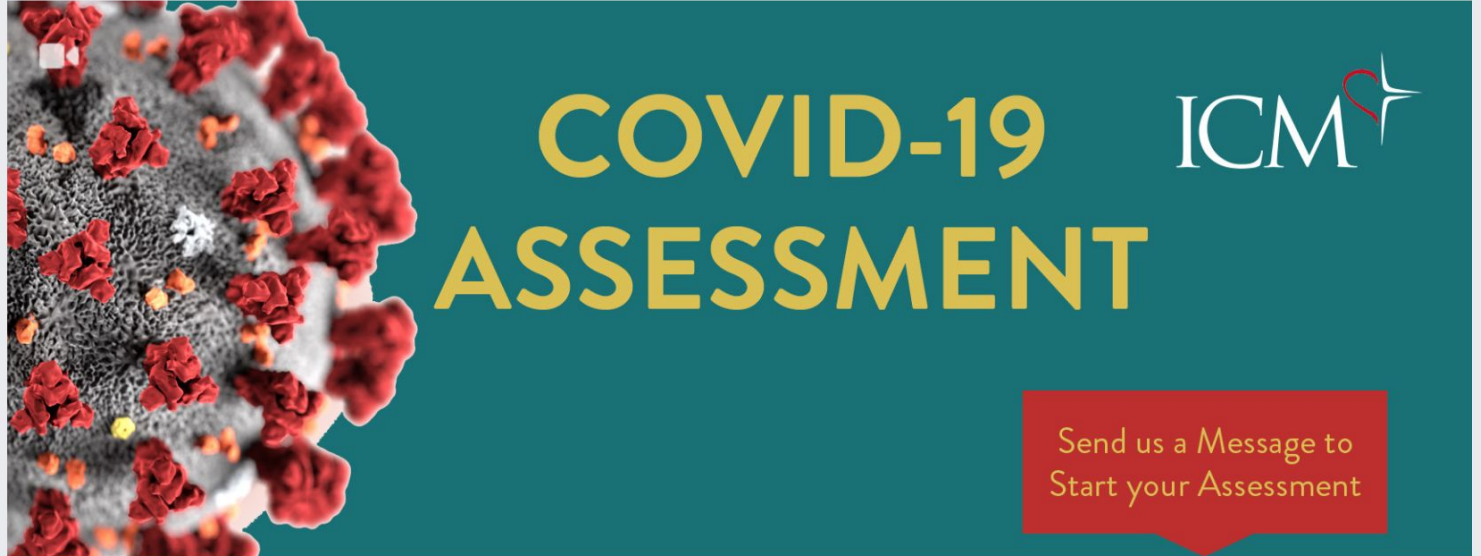


ICM Covid-19  
Assessment Bot  
@covid19assessment

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# Facebook Chatbot - COVID-19 assessment



ICM Covid-19 Assessment Bot



Hi Lincoln!



Which language would you prefer?

English

Hi Lincoln!

I'm a chatbot; created by ICM. We know this can be a scary time, but we created this automated service to help you know if you should seek professional medical treatment or stay home. To get started, I'll need to ask you a few questions, which I'll record only for COVID-19 research. By touching "Yes" below, you agree with ICM data privacy policy. Is that ok?



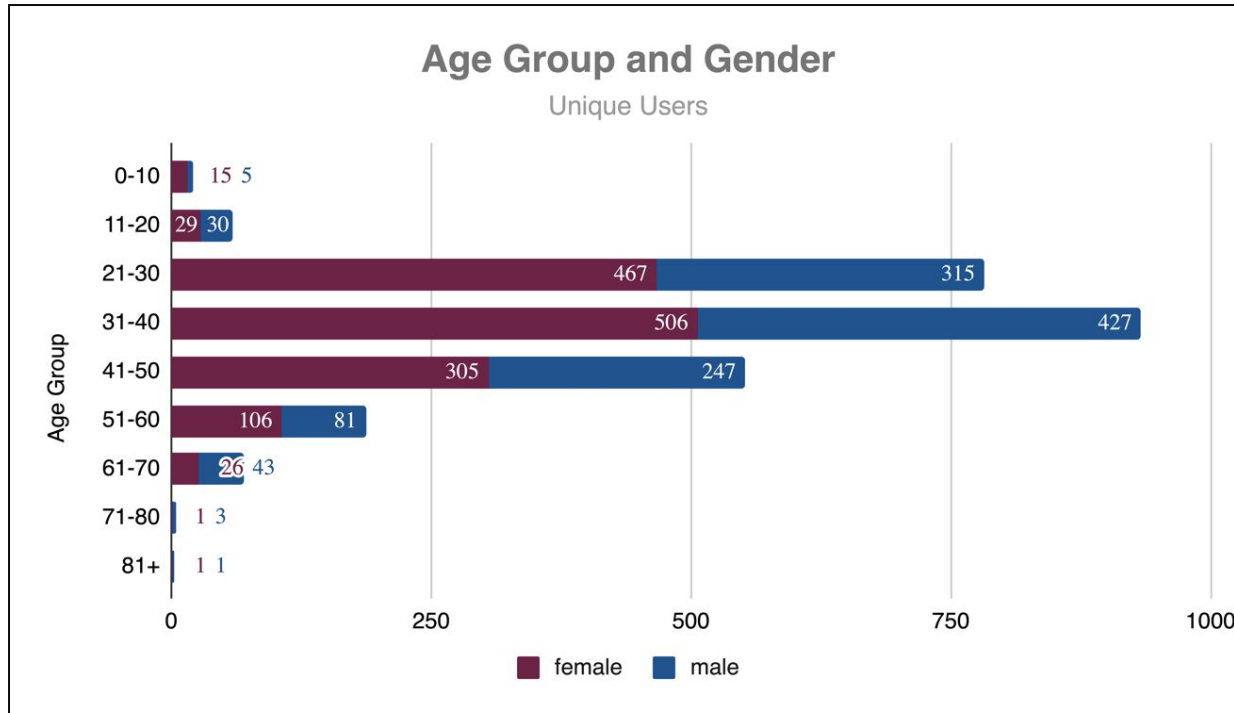
[Data Privacy Policy](#)

Yes



Lincoln, what's your age range?

## ICM COVID-19 Assessment Bot



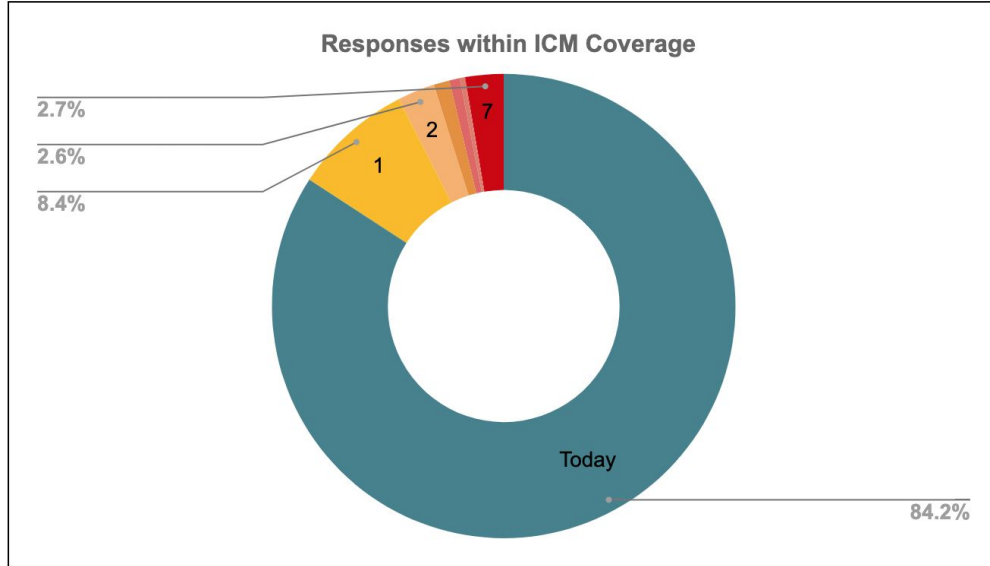
# Facebook Chatbot - COVID-19 assessment

## Food Security by Region

### Family Hunger

How many days has it been since you last ate?

Region	Today	1	2	3	4	5	6	7	Total	%
Region 1 (Ilocos region), Region 2 (Cagayan Valley), CAR	18	5	1	0	0	0	0	0	24	0.9%
Region 3 (Central Luzon) or 4A (Calabarzon) or 4B (Mimaropa)	72	12	1	3	2	0	1	2	93	3.4%
Region 5 (Bicol Region)	13	0	0	0	0	0	0	1	14	0.5%
Region 6 (Western Visayas)	449	44	28	8	3	3	0	17	552	20.0%
Region 7 (Central Visayas)	321	37	6	2	1	0	0	13	380	13.8%
Region 8 (Eastern Visayas)	23	0	0	0	1	0	0	0	24	0.9%
Region 9 (Zamboanga Peninsula)	99	10	0	1	3	0	0	1	114	4.1%
Region 10 (Northern Mindanao) or Region 13 (Caraga Region)	36	1	0	0	0	0	0	0	37	1.3%
ARMM or Region 11 (Davao Region) or Region 12 (Soccsksargen)	245	22	1	4	2	1	1	5	281	10.2%
NCR	932	155	31	16	9	4	3	25	1175	42.6%
Do not know region	51	9	1	1	1	1	0	3	67	2.4%
<b>Total</b>	<b>2259</b>	<b>295</b>	<b>69</b>	<b>35</b>	<b>22</b>	<b>9</b>	<b>5</b>	<b>67</b>	<b>2761</b>	<b>100%</b>
%	81.8%	10.7%	2.5%	1.3%	0.8%	0.3%	0.2%	2.4%	100.0%	



# Tracking Relief Operations



Date	Reporting Mechanism	Barangay	Municipality	Reported # of Families	# of Packs Requested	VALIDATED?	Approved for distribution	Actual # of Families	# of NUTRIPACKS DELIVERED
March 19,2020	Infocast	Tiglawigan	Cadiz City	30	90	Yes	Yes	30	90
March 19,2020	Infocast	Luna	Cadiz City	500	1500	Yes	Yes	500	1500
March 20,2020	Infocast	Vito	Sagay City	50	150	Yes	Yes	50	150
March 20,2020	Infocast	Tiglawigan	Cadiz City	30	90	Yes	Yes	30	90
March 23,2020	Infocast	Mabini	Cadiz City	60	180	Yes	Yes	60	180
March 23,2020	Infocast	Minapasok	Calatrava	350	1050	Yes	Yes	35	150
March 23,2020	Infocast	General Luna	Toboso	150	450	Yes	Yes	150	450
March 23,2020	Infocast	Poblacion	Toboso	150	450	Yes	Yes	150	450
March 23,2020	Infocast	San Isidro	Toboso	50	150	Yes	Yes	50	150
March 23,2020	Infocast	Tabun-ac	Toboso	230	690	Yes	Yes	230	690
March 23,2020	Infocast	Bug-ang	Toboso	150	450	Yes	Yes	150	450
March 23,2020	Infocast	Hilub-ang	Calatrava	100	300	Yes	Yes	100	300
March 23,2020	Infocast	Salamanca	Toboso	50	150	Yes	Yes	50	150
March 23,2020	Infocast	Bunga	Don Salvador Bener	80	240	Yes	Yes	80	240
March 24,2020	Infocast	Mabini	Cadiz City	60	180	Yes	Yes	180	180
March 24	Infocast	Paraiso	Sagay City	60	180	Yes	Yes		
March 24	Infocast	Vista Alegre	Bacolod City	300	900	Yes	Yes	150	1230
March 24,2020	Infocast	Brgy 1	San Carlos City	150	450	Yes	Yes	150	1050

# Tracking Relief Operations



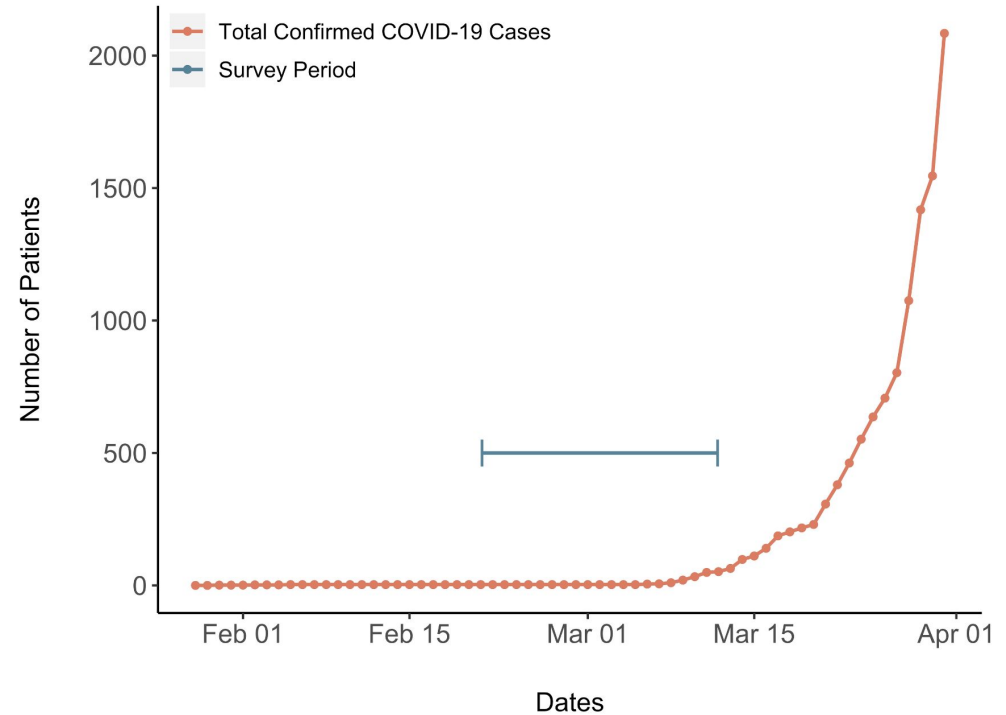
## COVID-19 Relief Operations Overview

	Bacolod	Bohol	Cebu	Davao	Dipolog	Duma	Gensan	Iloilo	Kalibo	Koro	Pala	Tac	TOTAL
REPORTS	265	166	74	59	188	116	180	130	108	107	134	122	1,384
VALIDATED	128	117	44	42	103	104	156	119	74	89	119	70	1,165
APPROVED FOR DISTRIBUTION	79	71	44	29	72	104	118	113	74	63	102	70	939
DISPERSED (RESPONSES)	70	37	46	19	72	104	20	75	35	44	88	66	676
FAMILIES IN NEED	12,750	4,107	5,625	5,575	8,974	4,184	31,989	10,535	14,188	17,411	7,464	2,590	125,392
FAMILIES HELPED	12,051	2,430	4,202	1,409	7,948	4,775	12,126	8,085	4,418	14,052	10,457	4,044	85,997
NUTRIPACKS DELIVERED	45,713	13,622	23,553	5,716	51,472	15,302	18,319	55,235	35,411	45,900	33,702	15,051	358,996
DELIVERY BY LGU	58	4	25	58	52	65	14	59	27	34	52	30	478
DELIVERY BY PASTOR ONLY	13	21	4	13	0	39	7	8	1	1	34	37	178
DELIVERY BY ICM	1	8	14	1	0	0	0	15	7	9	3	1	59
DISTRIBUTED BY PASTOR	31	23	17	31	2	104	2	0	5	17	11	60	303
DISTRIBUTED BY LGU	2	1	2	2	0	0	1	0	0	0	2	2	12
DISTRIBUTED BY BOTH	37	8	23	37	2	0	18	73	28	27	76	6	335
NUTRIPACK INVENTORY	179,380	302,705	122,448	72,789	111,897	154,068	273,077	97,807	58,360	74,727	79,477	29,921	1,556,656
NUTRIPACK WEEKLY ALLOWANCE	31,222	50,451	43,208	26,135	36,503	25,528	48,393	36,363	18,097	22,659	26,492	11,906	376,959



# Early KAP survey of ICM participants

- Knowledge, attitudes and practices (KAP) questions adapted from other pandemics were inserted into ICM's regular surveys
- Objective: quick analysis to inform COVID-19 response in the country



# Early KAP survey of ICM participants

**Table 3.** Knowledge, Attitudes and Practices toward COVID-19 among income-poor households in the Philippines

Questions	Yes (%)	No (%)	Don't know (%)
<b>Knowledge</b>			
Have you heard of the new coronavirus (COVID-19)?	2090 (94.0)	117 (5.2)	17 (0.8)
Can COVID-19 be transmitted (caught or spread) by...			
Coughing and sneezing?	1870 (89.5)	116 (5.5)	104 (5.0)
Face to face talking?	1735 (83.0)	206 (9.9)	149 (7.1)
Handshakes or hugs?	1698 (81.2)	252 (12.1)	140 (6.7)
Touching an item someone else touched?	1518 (72.6)	376 (18.0)	196 (9.4)
Sharing and eating from the same dish?	1774 (84.9)	193 (9.2)	123 (5.9)
<b>Attitudes</b>			
Has your daily life been disturbed (interrupted, changed) by COVID-19?	1128 (54.0)	962 (46.0)	..
Do you worry about contracting COVID-19?	1679 (80.3)	411 (19.7)	..

# Early KAP survey of ICM participants

**Table 8.** Groupwise means and results of Kruskal-Wallis Test on KAP determinants of COVID-19 practices among income-poor households in the Philippines

Variables	Number of COVID-19 preventive measures taken						
	<i>Mean</i>	<i>95% CI</i>	$X^2$	<i>p-value</i>			
Number of COVID-19 transmission modes identified			484.79	<0.001			
None	0.67	(0.51 – 0.84)					
One	2.31	(1.98 – 2.65)					
Two	2.59	(2.31 – 2.87)					
Three	2.81	(2.61 – 3.00)					
Four	3.24	(3.09 – 3.39)					
Five	3.44	(3.37 – 3.51)					
Has your daily life been disturbed (interrupted, changed) by the new coronavirus?			163.53	<0.001			
No	2.73	(2.63 – 2.82)					
Yes	3.56	(3.49 – 3.64)					
Do you worry about contracting the new coronavirus?			203.75	<0.001			
No	2.23	(2.08 – 2.39)					
Yes, a little	3.27	(3.18 – 3.35)					
Yes, very much	3.61	(3.52 – 3.70)					
N = 2090							

Preprint Communication Version 1 This version is not peer-reviewed

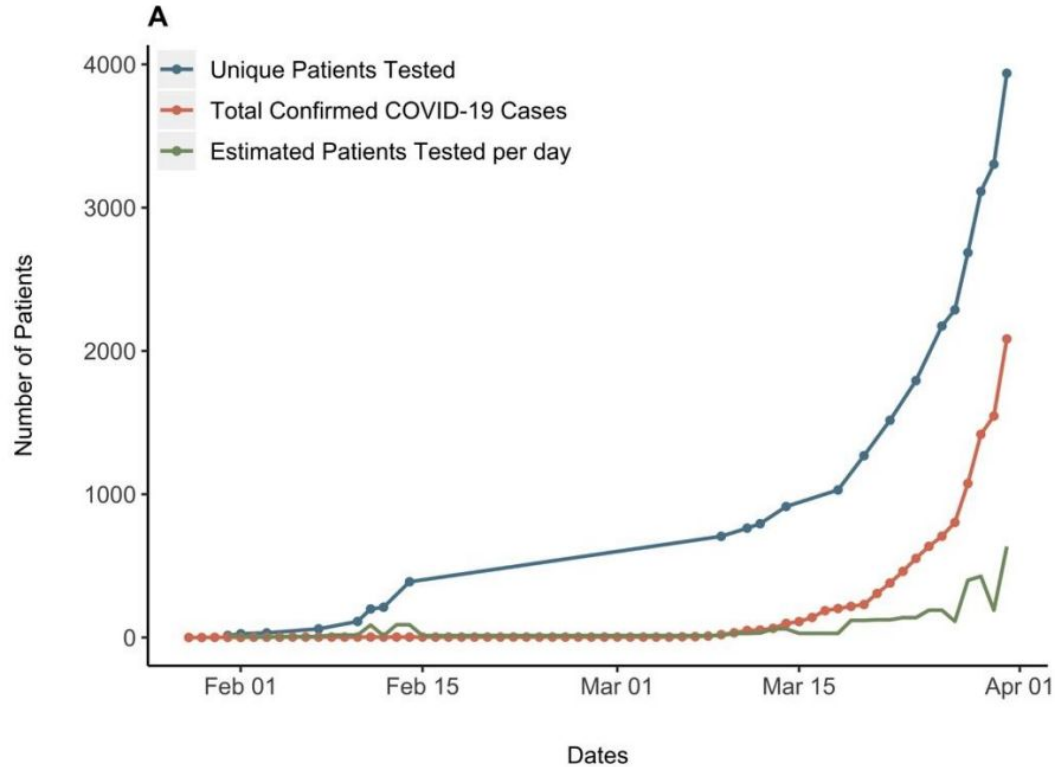
## Challenges in Controlling SARS-CoV-2 in a Lower-middle Income Country and the Potential Unintended Effects due to Aggressive Restrictions

 Lincoln Lau \* ,  Peng Wu,  Daryn Go,  Warren Dodd ,  Charles Yu

Version 1 : Received: 7 April 2020 / Approved: 8 April 2020 / Online: 8 April 2020 (12:03:43 CEST)

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<https://www.preprints.org/manuscript/202004.0130>



**Figure. Confirmed COVID-19 cases and patient testing over time in the Philippines**

- Chatbots & web-based interactive data collection methods
  - guide people through algorithms
  - map food security to direct interventions
  - quick way to collect data, and interact if needed
  
- KAP surveys
  - informs health promotion & education activities
  
- Country/Regional data
  - MEAL capacity allows for analysis & potentially weighing-in on policy