OPEN GOVERNMENT DATA GOVERNANCE

- THE CASE OF THE HEALTH SECTOR

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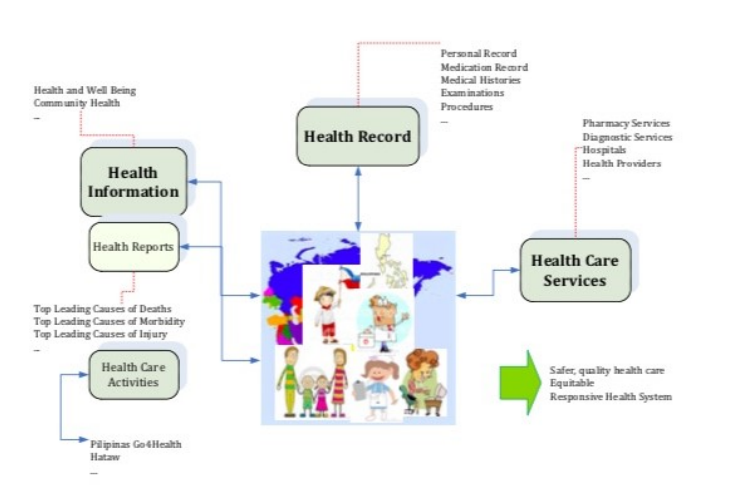
Data Governance

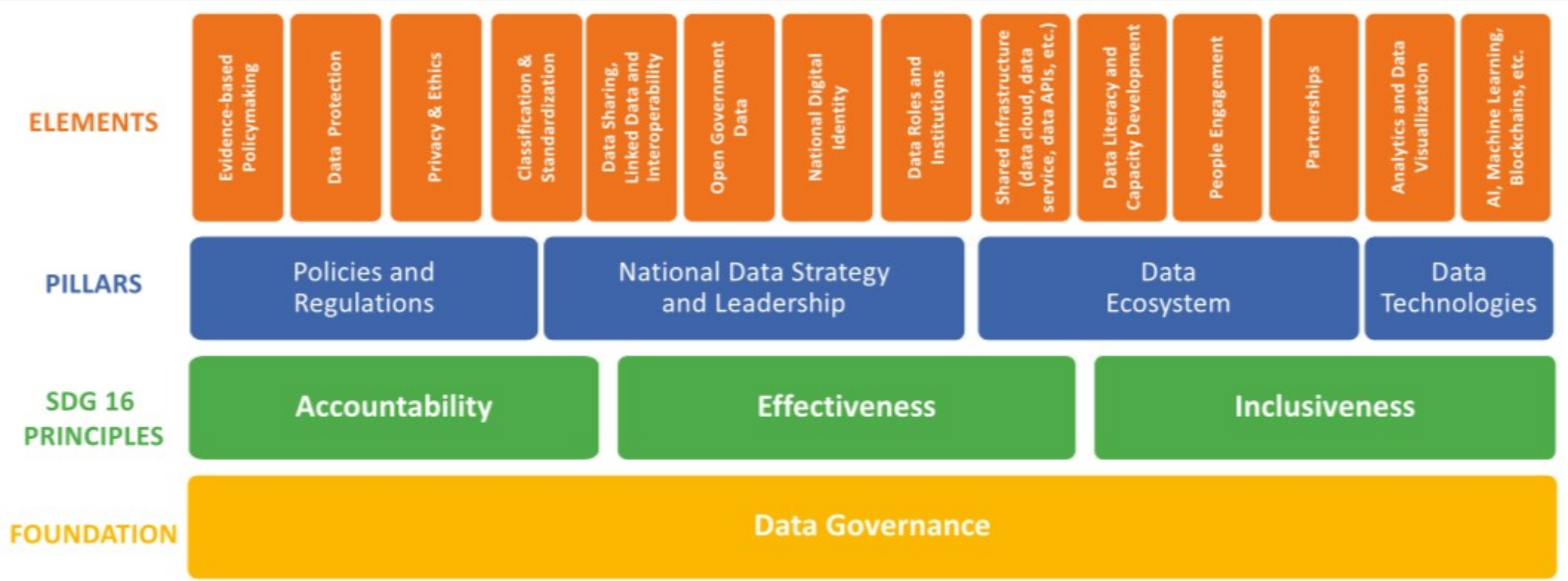


Source: DOH 2014

- "a systemic and multi-dimensional approach to **setting policies and regulations**, establishing **leadership for institutional coordination** and national strategy, nurturing an **enabling data ecosystem**, and **streamlining data management**" (Yao and Park (UNDESA) 2020).
- "the exercise of authority and control (planning, monitoring, and enforcing) over the management of data assets" (Earley et al, 2017, p106).

Data Governance for eGovernment

How did we apply it in the case of Health?
In the case of Covid Data?



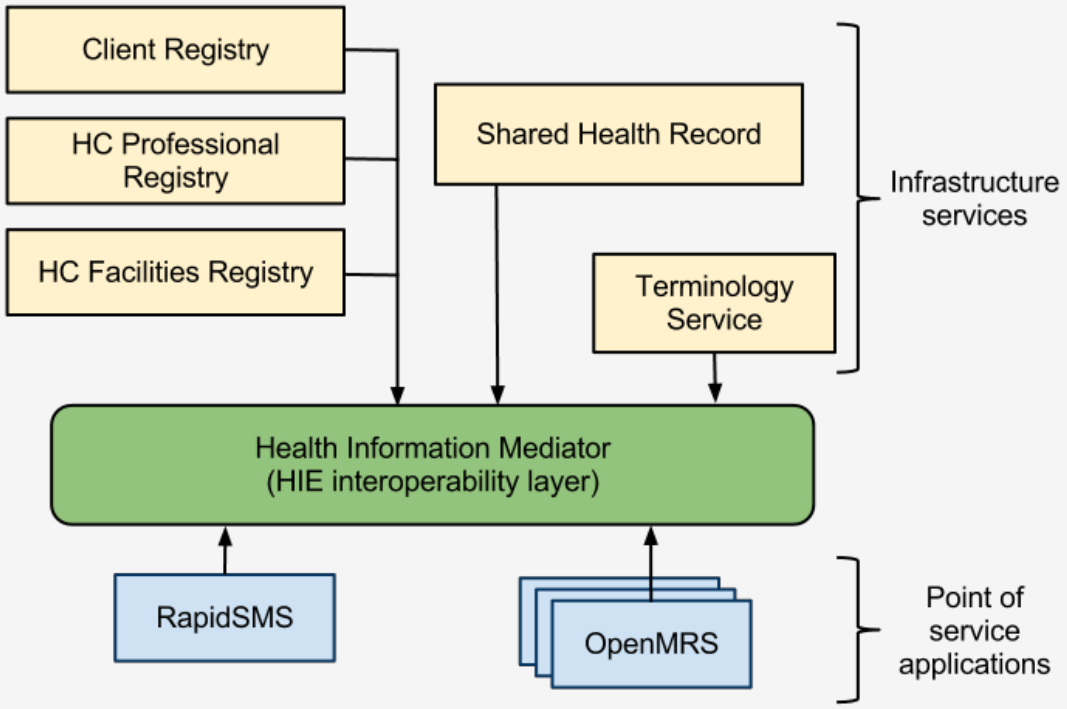
(Source: UNDESA Egovernment Survey 2020, p 166)

Philippine eHealth Vision

(source: DOH Philippines eHealth Strategic Framework and Plan (2014-2020)

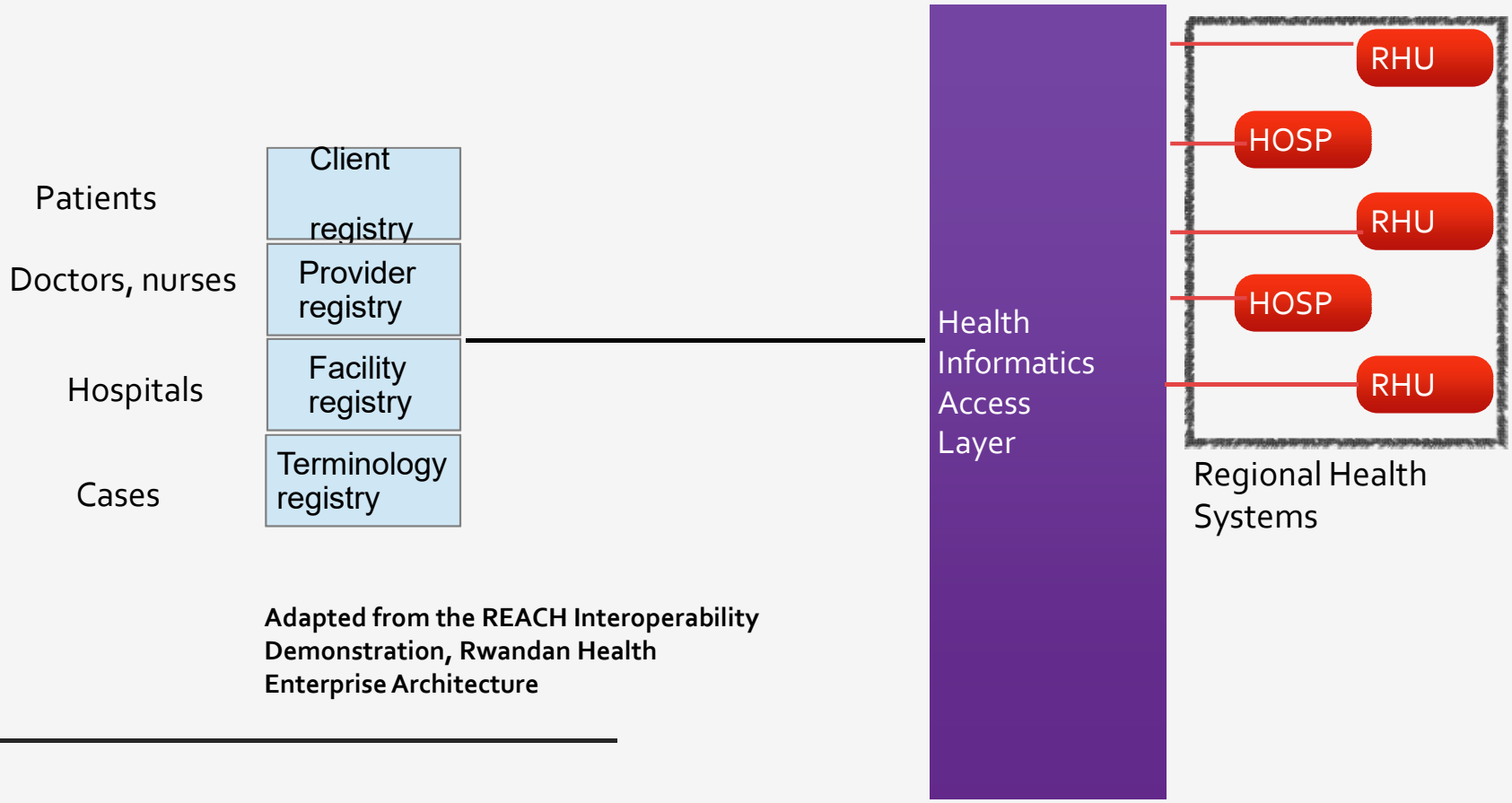
- By 2020 eHealth will enable widespread **access** to **health care services, health information**, and **securely** share and exchange patients' information in support to a safer, quality health care, more equitable and responsive health system for all the Filipino people by transforming the way information is **used to plan, manage, deliver and monitor health services.**

Health Data Ecosystem Enterprise Architecture



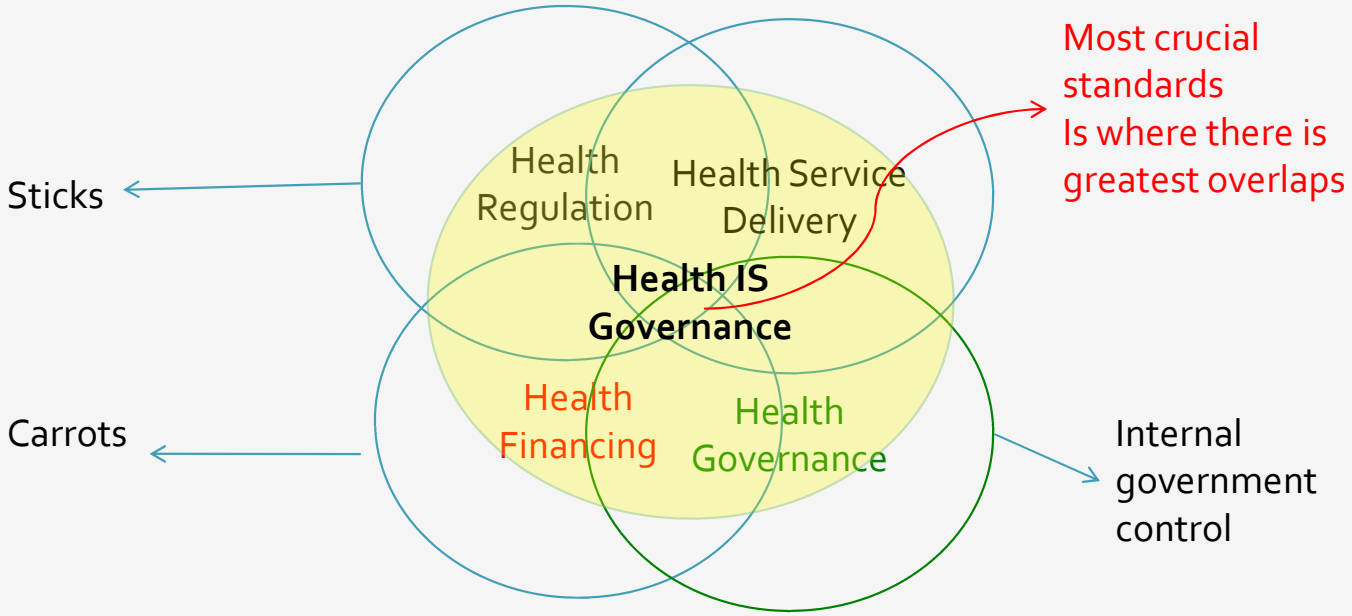
RHEA model

Health-sector Wide Enterprise Architecture



Adapted from the REACH Interoperability Demonstration, Rwandan Health Enterprise Architecture

HIS Governance: Carrots, sticks and internal controls



Need to develop governance structures to ensure accountability, transparency and effective leadership.

Can plans be implemented/enforced within current governance structure?

eHealth Plan components

(DOH 2014)

- **Governance** -Directs and coordinates eHealth activities at all levels like hospitals and health care providers. Critical areas of governance are management of the eHealth agenda, stakeholders' engagement, strategic architecture, clinical safety, management and operation, monitoring and evaluation, and policy oversight
- Legislation, Policy and Compliance
- **Standards and Interoperability – data structure, terminologies, and messaging**
- Strategy and Investment
- **Infrastructure** – est. and support health information exchange (HIE) across geographical and sectoral boundaries
- Human Resources
- **eHealth Solutions** – addressing needs of various stakeholders

Challenges in Cross Border Supply of Service (telemedicine):

Governance

- Regional (ASEAN) Regulatory bottlenecks in Telemedicine
- No specific regulatory framework for telemedicine in the Philippines
- **Domestic Electronic medical records are interoperable –** despite an existing PHIE, it is not adopted as the overarching framework for the interoperability of health information across facilities
- Cross-border data privacy and sharing regulations are unclear

(from **Ulep and Casas 2021,** PIDS Discussion Series No. 2021-16)

Open and Public Data Sources of Health Data

(pre-pandemic)

Open Data are "data which are made accessible and available in a standardized machine-readable format and under a license that allows it to be re-used and re- shared. Because the type, format and **quality of data vary** significantly, it is a **challenge to certify the data** and put them in **effective use with value added**. (Yao & Park 2020)

- PSA – limited, not timely
- DOH website – mostly reports and not in pdf
- FOI datasets – limited, in pdf (not technically open)
- ODPH – open in format, but limited and not updated
- eFOI – takes time, no guarantee information will be provided

Source: Alampay (2020)

Dimensions of Openness

- **Data Openness** -data being free to access, and free to manipulate
- **People Openness** - who can actively participate and/or collaborate
- **Process Openness** - the processes involved is transparent and whether the process is open to inputs from participants

Uses of open and big data analytics in responding to Covid-19

- Conducting real-time situation analysis, contact tracing, and early timely diagnosis for early containment
- Facilitating coordination and collaboration between national and local government
- Securing public trust in government through better transparency and improved communication
- Countering misinformation
- Identifying and addressing special vulnerability and needs of vulnerable groups by gathering disaggregated data
- Supporting effective management od medical equipment, supplies and demands

(Source: Yao & Park 2020:1)

Covid data concerns

Early issues:

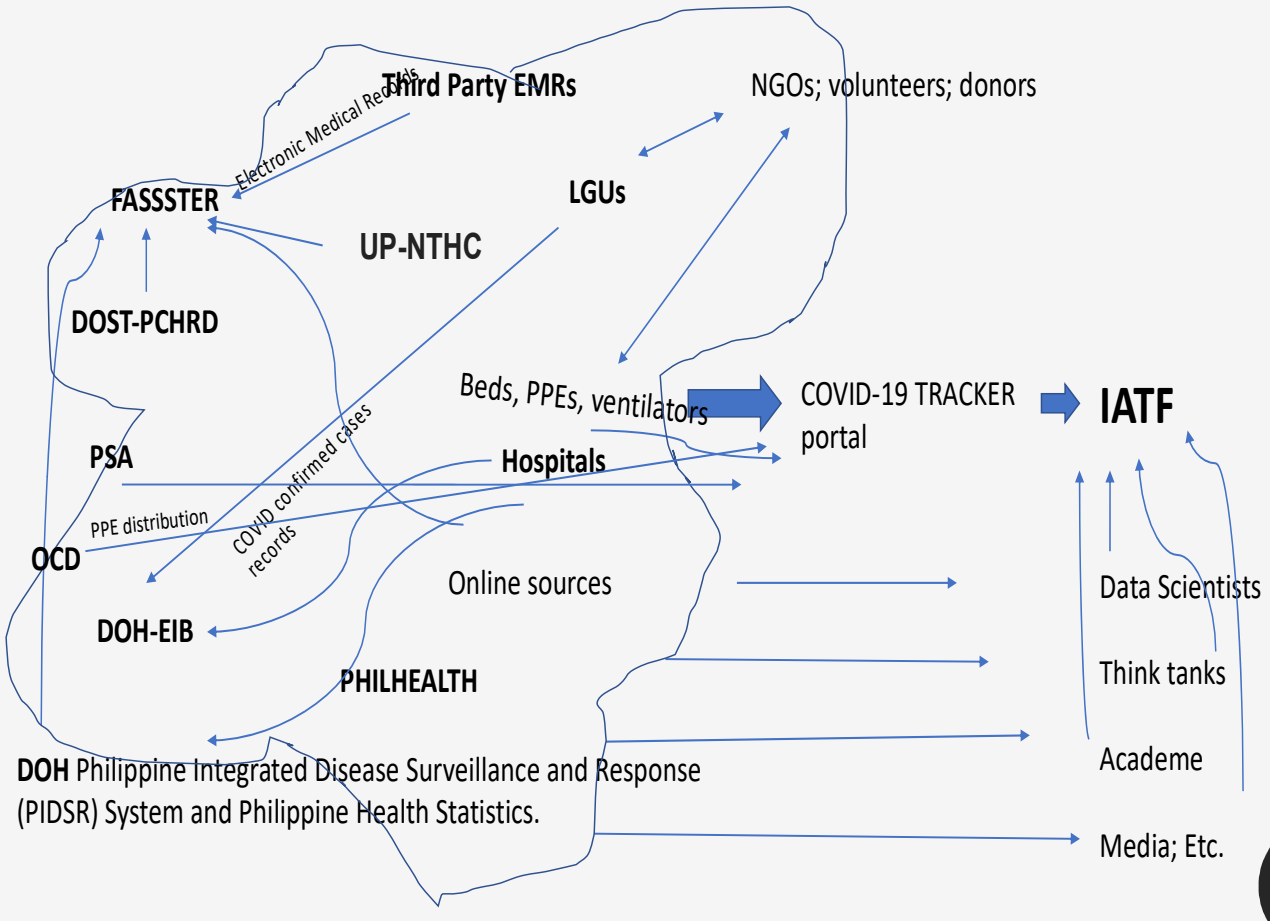
- Limited disease surveillance data to est. cases
- Data privacy of obtaining data of Cov+
- Testing capacity limitations
- Delays in getting results
- Data capture, data validation
- Contact tracing

Stakeholder data interests:

- Who were infected, how many, frontliners, when?
- Where are the cases?
- Hospital supplies (PPE, beds, testing kits, costs)

Development of a Covid-19 Health Data Ecosystem

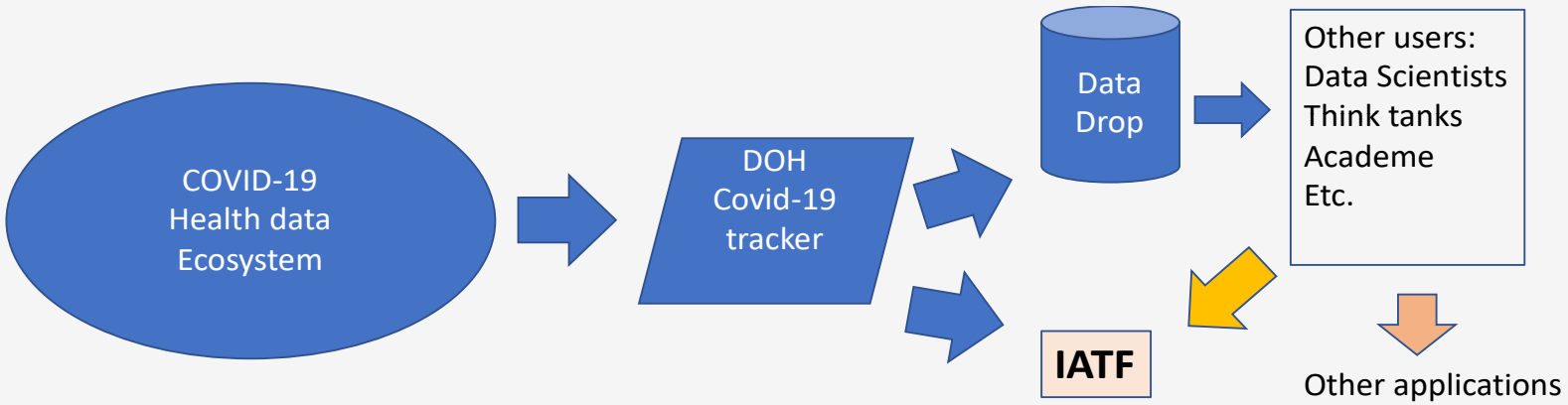
(start of pandemic)



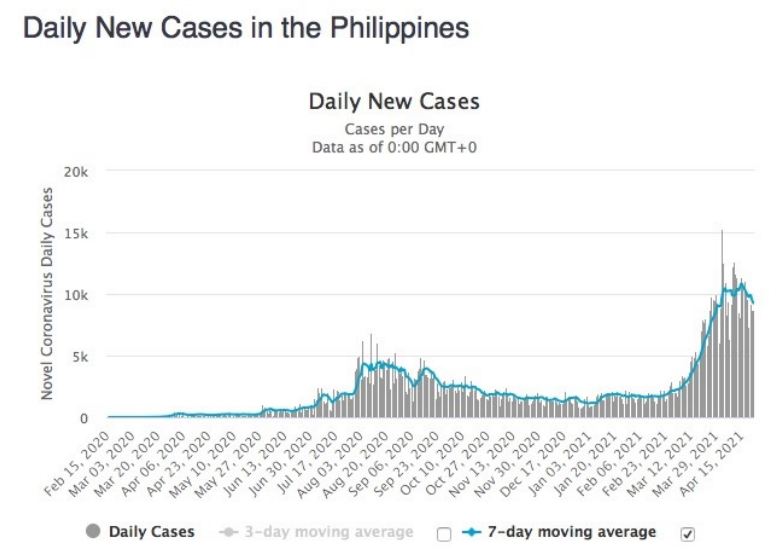
Covid Data reporting

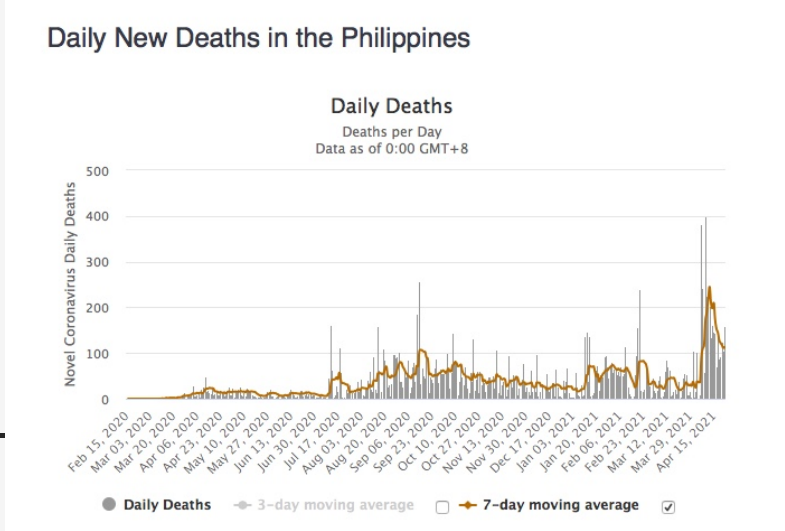
- Daily updates are not necessarily when they got infected or tested; Data lag
- LGU developed their own systems for trackng PUMs, PUIs
- By mid-April – creation of the covid19tracker
- Open Access to datadump
- Provided data privacy and confidentiality statement
- Changes in reporting protocols (fresh, late)

Covid-19 Open Data Model



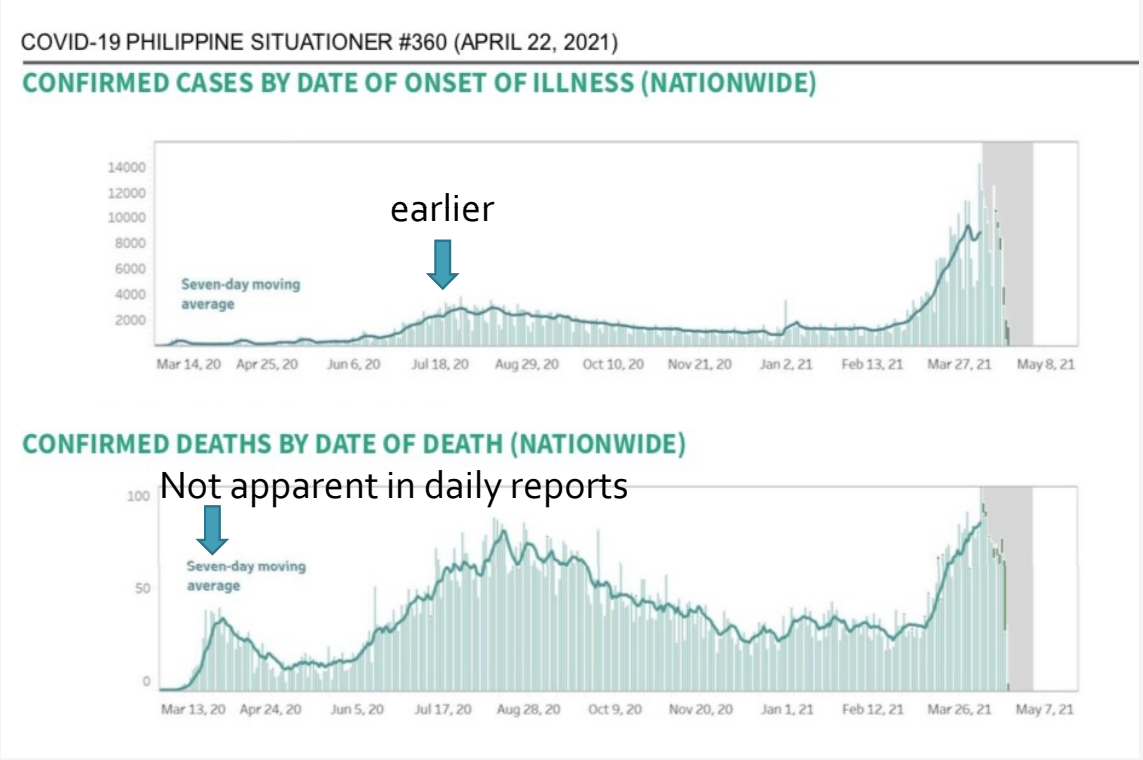
From Worldometer:





Data Visualizations: Daily reporting (inputs to Worldometer); Reporting by Date of onset/ Date of death

From Covid-19 Daily Situationer (DOH shared googledrive link)

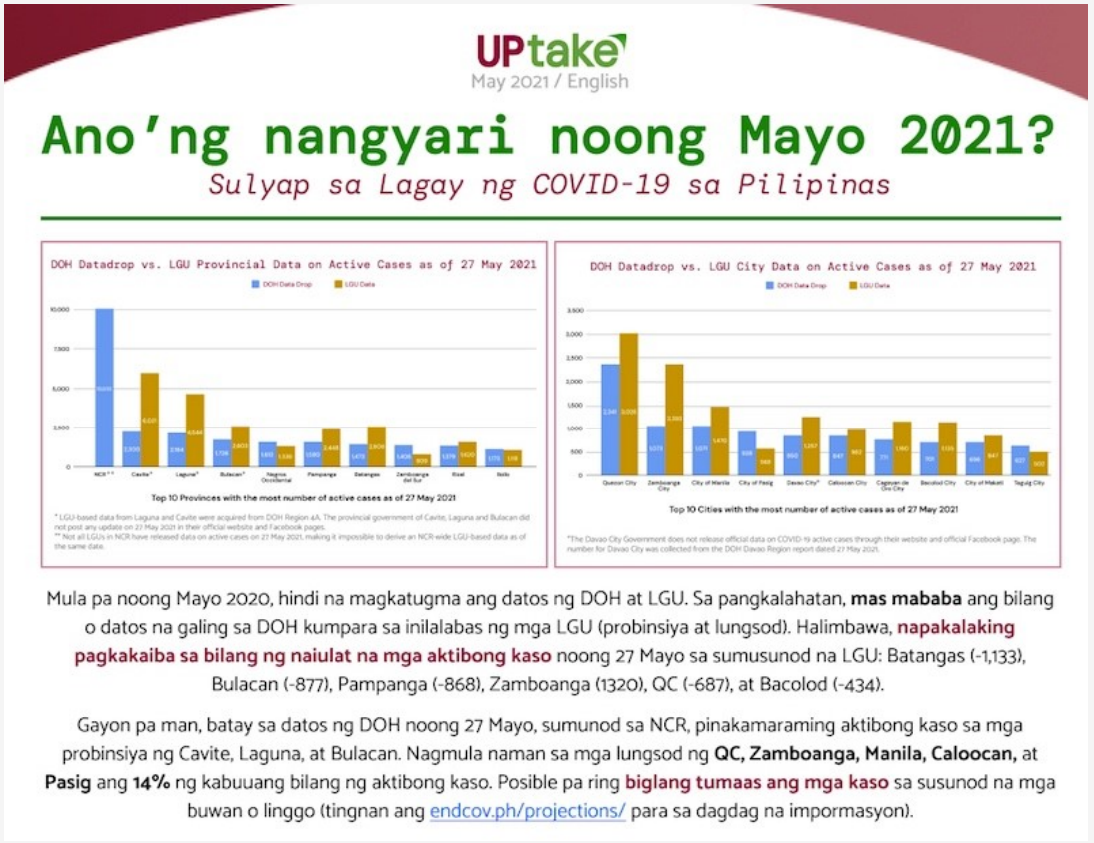


Data inconsistencies across levels of government

Data reporting changes (recovered – died)

Data time lags

Data disaggregation is key during a pandemic (Pan American Health association as cited in Yao and Park 2020)



UPtake
May 2021 / English

Ano'ng nangyari noong Mayo 2021?

Sulyap sa Lagay ng COVID-19 sa Pilipinas

Mula pa noong Mayo 2020, hindi na magkatugma ang datos ng DOH at LGU. Sa pangkalahatan, **mas mababa** ang bilang o datos na galing sa DOH kumpara sa inilalabas ng mga LGU (probinsiya at lungsod). Halimbawa, **napakalaking pagkakaiba sa bilang ng naiulat na mga aktibong kaso** noong 27 Mayo sa sumusunod na LGU: Batangas (-1,133), Bulacan (-877), Pampanga (-868), Zamboanga (1320), QC (-687), at Bacolod (-434).

Gayon pa man, batay sa datos ng DOH noong 27 Mayo, sumunod sa NCR, pinakamaraming aktibong kaso sa mga probinsiya ng Cavite, Laguna, at Bulacan. Nagmula naman sa mga lungsod ng **QC, Zamboanga, Manila, Caloocan,** at **Pasig** ang **14%** ng kabuuang bilang ng aktibong kaso. Posible pa ring **biglang tumaas ang mga kaso** sa susunod na mga buwan o linggo (tingnan ang endcov.ph/projections/ para sa dagdag na impormasyon).

Source: UPRI; UP Pandemic Response Team

Health Data Model Openness Pre-COVID and during COVID

Openness	OpenData/eFOI/ DOH portal	COVID-19 Tracker
Content	Limited, not timely, raw data, and not useful Many data are in *.pdf*	Focused, regularly updated (daily); included crucial data on supplies; can be disaggregated by regions/LGUsand hospitals
People	Heavily reliant on DOH data; not clear how reporting from field is incorporated	Crowd sourced; data not only from DOH central
Process	Delayed updating of open data Some feedback provided on eFOI portal	Open to inputs from stakeholders; data requirements evolved; clear outputs from the data were generated - Reporting changes are transparent

From Alampay (2020)

Recap: Data Governance Issues

- Data Protection and Privacy – should individuals be identified; data ownership and accountabilities
- Interoperability – LGU to national; various contact tracing apps need to be interoperable
- Data quality – changes in patient status; location identifier; data changes
- Timeliness – time lags in data reporting/capture
- Decision parameters – are decisions consistently applied for quarantine guidelines based on good data

Recap

- **Data Governance focuses on how decisions are made about data and how people and processes are expected to behave in relation to data,** by ensuring that data is managed properly according to policies and best practices (Ladley, 2012).
- More can be improved in terms of data sharing to manage epidemics (WHO, 2018/2019), and outbreak analytics is still a developing field with many gaps in terms of data collection, analysis and reporting (Polonsky et al, 2019).
- A centralized data platform for coordinating data partnership is critical for facilitating effective stakeholder collaboration and mobilizing the whole of society in the Covid-19 response (Yao and Park 2020:3-4)

Conclusion

- Due to several factors including varied governance structures and limited interdisciplinary interaction between health and other sectors, the multi-sectoral nature of health in disaster risk reduction strategies remains a constant challenge (Dar et al, 2014).
- With the pandemic, however, the implications of poor **Health Information System** **interoperability** is no longer just HEALTH SECTOR concern--- but rather the **concern of the WHOLE OF GOVERNMENT** (LGUs and other branches of the national government (e.g. DTI, DILG, DOT) as well) --- this can help hasten systemwide interoperability– forcing analog components, that in the past were resistant, to now cooperate.

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