



MASIMBA MAREVERWA

Foresight 2021

17.05.21

REIMAGINE. RETHINK. REBUILD.

REvisualizing the path to data standardisation
with industry Covid views



insight

foresight
dialogues 2021

COVID-19 presented immense challenges to the health industry from a data perspective

- Traditionally, ICD's on pathology claims don't provide outcome
- In the hospital space, ICDs were not designed to report the absence of a disease for surveillance purposes

U07.1 - COVID-19, *virus identified*, disease diagnosis of COVID-19 confirmed by laboratory testing

U07.2 - COVID-19, *virus not identified*, assigned to a clinical or epidemiological diagnosis of COVID-19 where laboratory confirmation is inconclusive or not available

You have the data. So what?

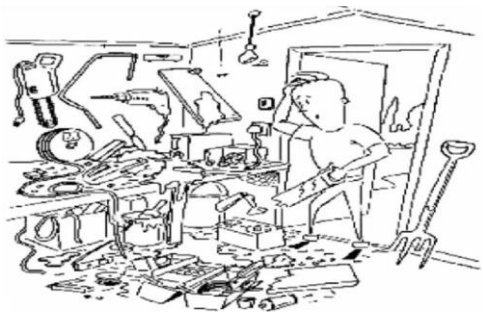
The data needs to be collected,
isolated, and used to provide useful
insights



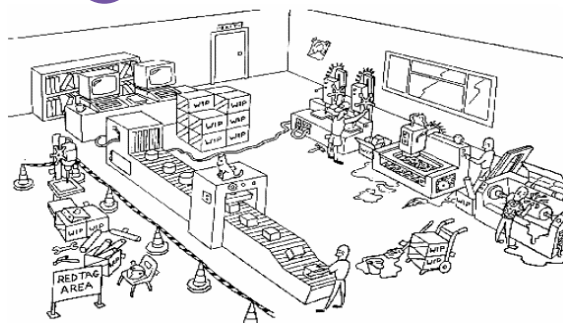
insight

foresight
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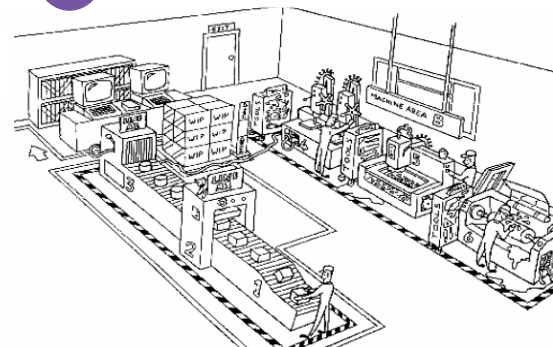
1 Our Environment (generally)



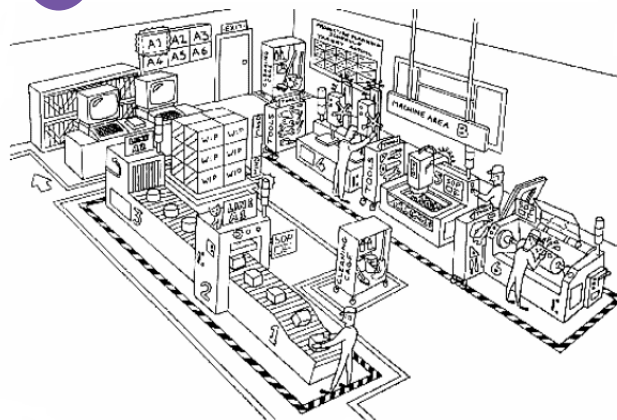
2 After clearing...



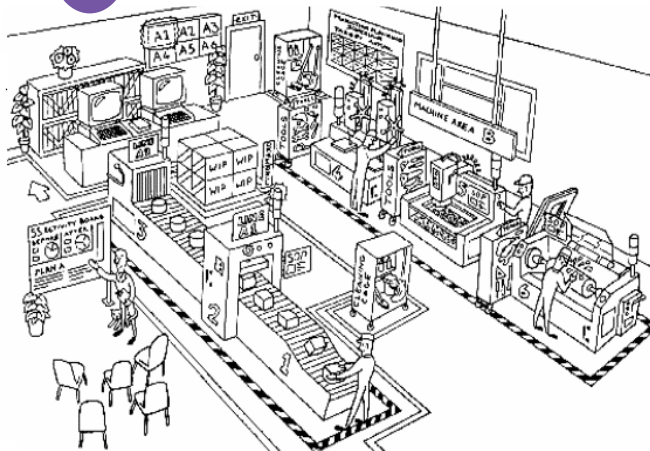
3 After organising...



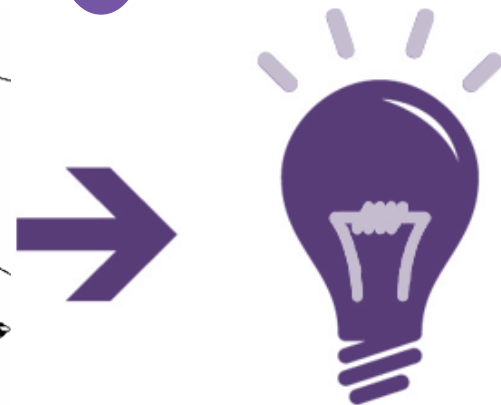
4 After standardising...



5 Building the discipline



6 Insights from data



**Engineer a sophisticated master data
reference table**

Pathology
results

Pathology results

ICDs

Membership



Claims

Pre-authorisations

Recorded on “event date” not “reporting date”

Pathology data

Previously limited

Now incorporated and isolated

Enriched engineered master data

Used auths for hospitalisation

Tracking of deaths

Those who tested negative

Those who have not tested

Healthy

Healthy to Covid-19 positive

Covid-19 positive to healthy

Covid-19

Healthy to dead

Covid-19 to dead

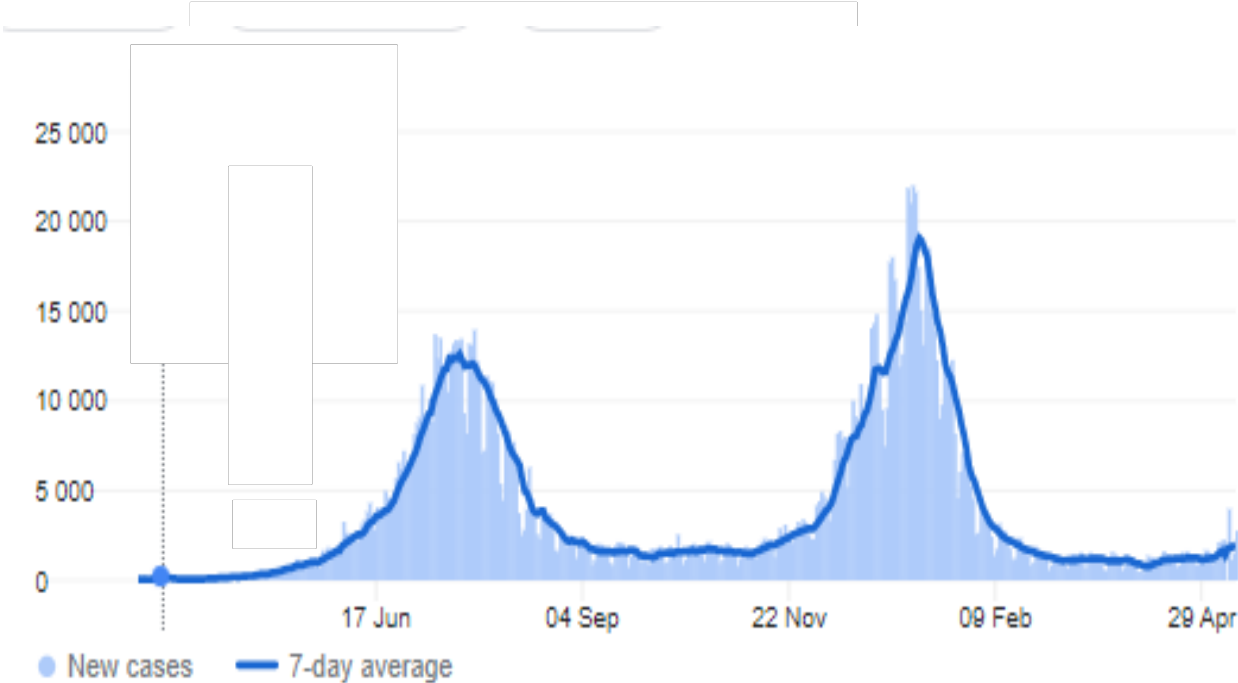
Dead

We used a simple multi-state model

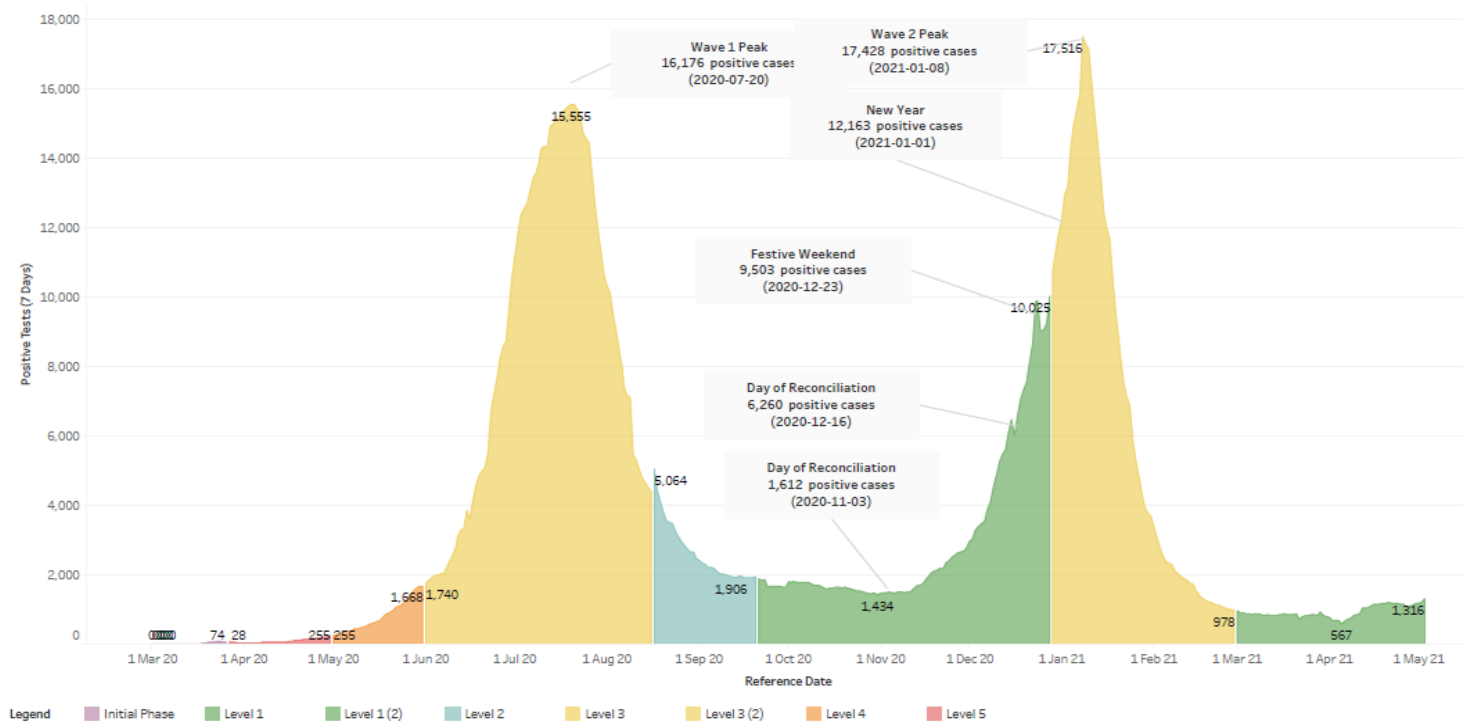


The end result

National number of positive cases



National number of positive cases by lockdown level



COVID-19 REPORT: TESTING

Province

All

Date

1/1/2020

5/31/2021

▲ Indicates week change

Report date: 11 May 2021

780031

▲ 8.663 (1.1%)

Tests

144,928

▲ 717 (0.5%)

Positive Individuals

36,766

▲ 240 (0.7%)

Admissions*

*38,593 including re-admissions

23.7%

(23.7% last week)

Admission Rate

36,454

▲ 399 (1.1%)

Discharged

135,633

▲ 694 (0.5%)

Recoveries

93.6%

(93.6% last week)

Recovery Rate

7,600

▲ 6 (0.1%)

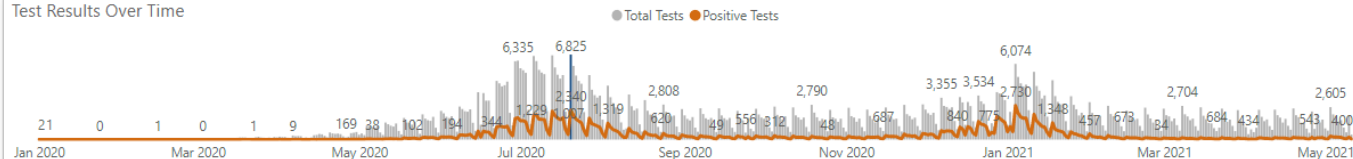
Fatalities

5.2%

(5.3% last week)

Fatality Rate

Test Results Over Time



COVID-19 REPORT: PAR ADMISSIONS

Province

All

Date

1/1/2020

5/31/2021

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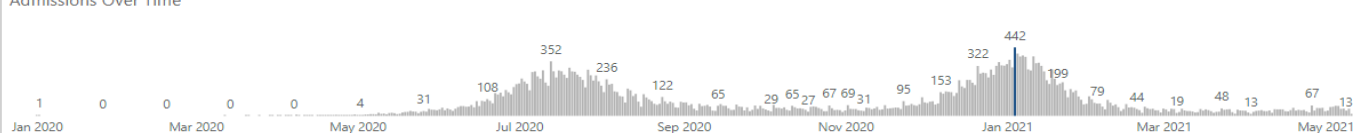
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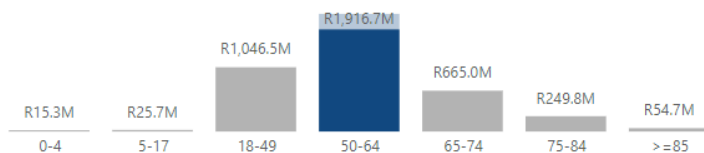
Fatality Rate

Admissions Over Time

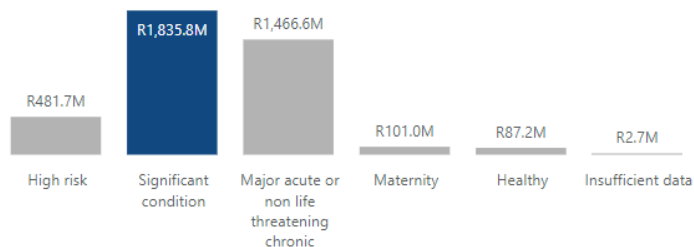


In-hospital costs

Cost per Age Group

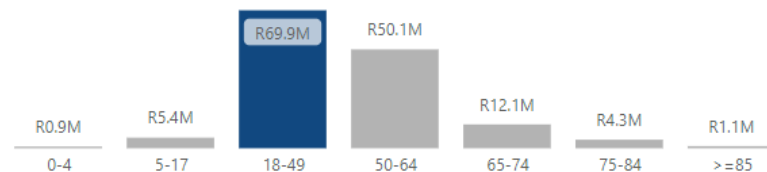


Cost per Risk Group



Diagnosis and out of hospital costs

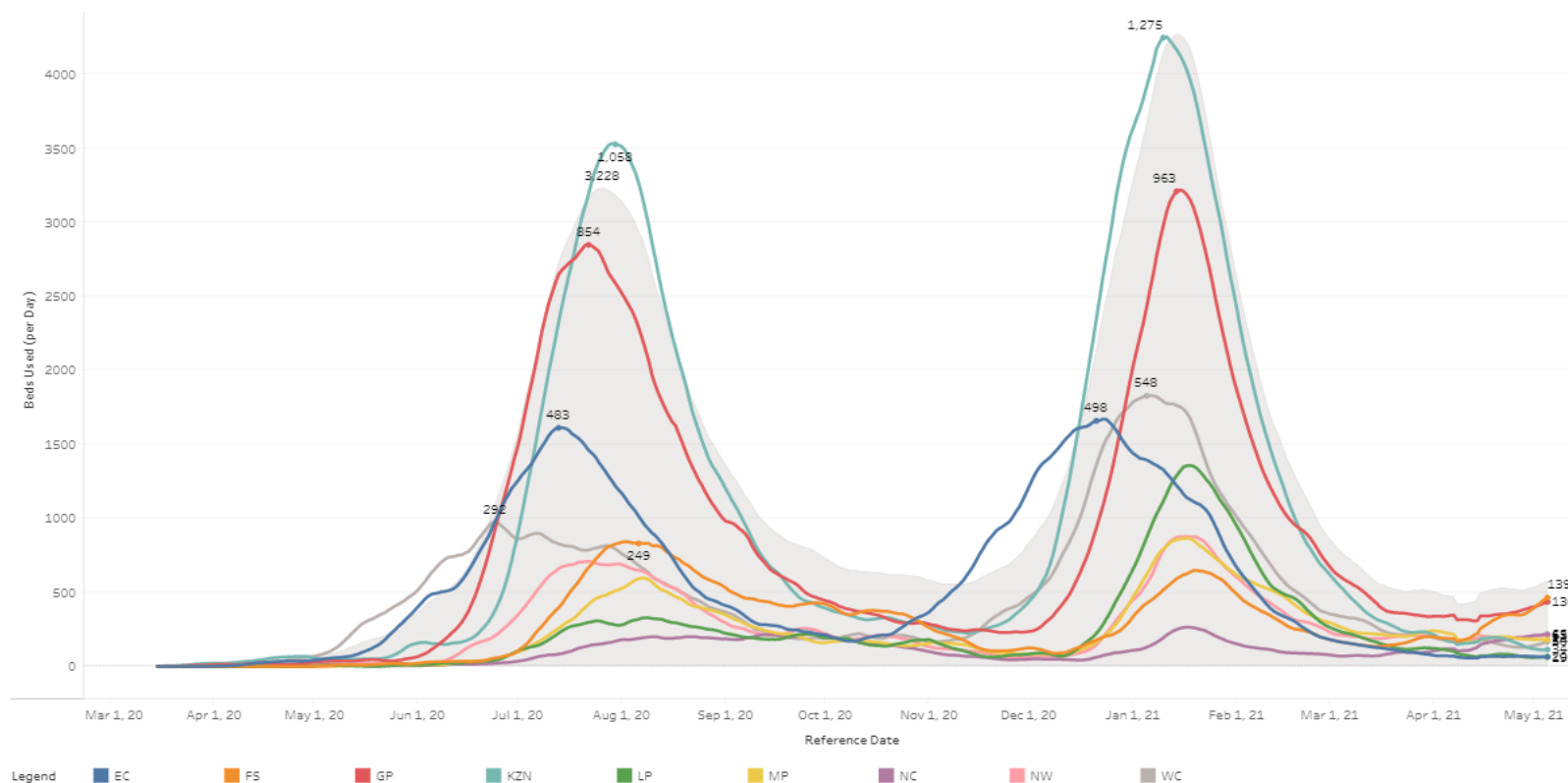
Out-of-Hospital Cost per Age Group



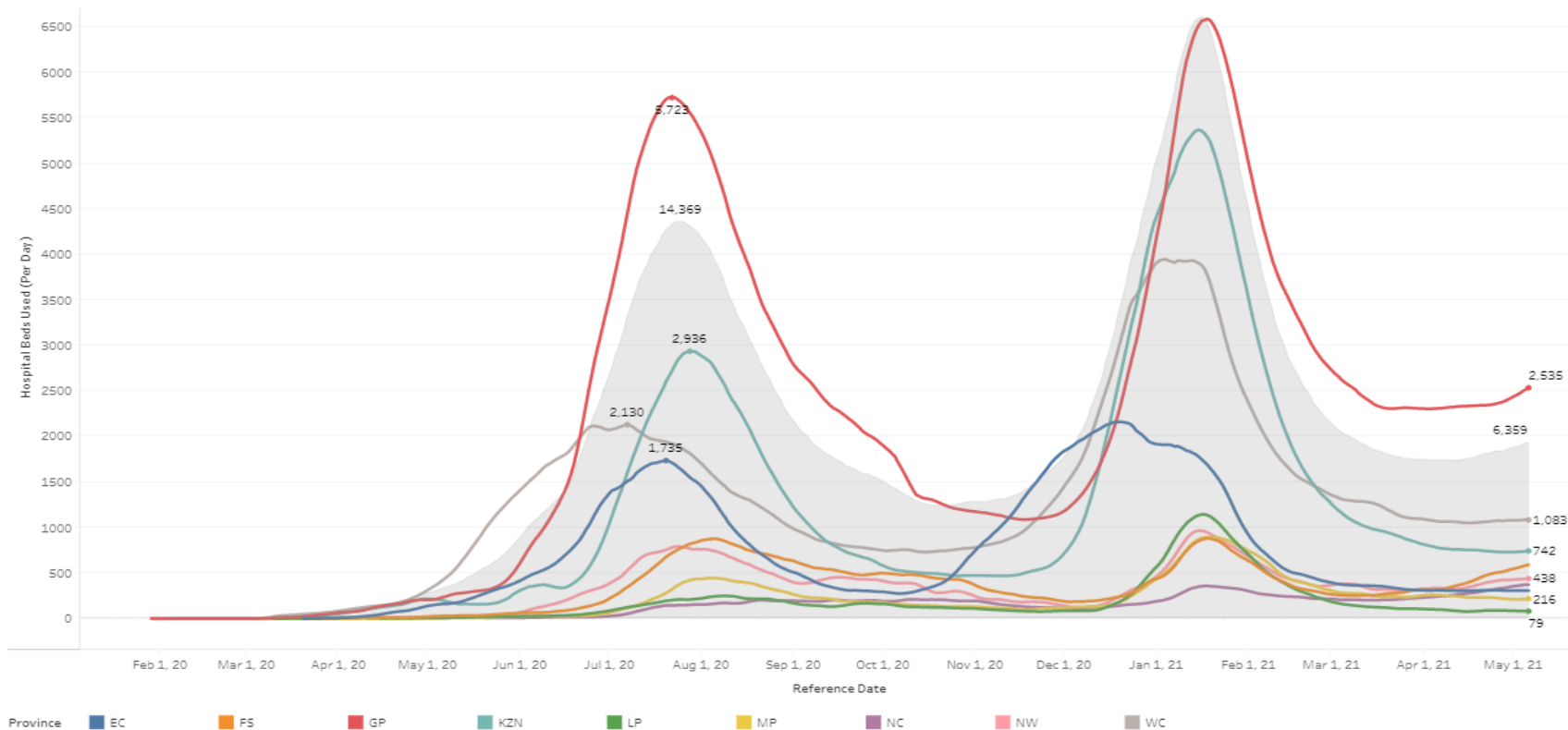
Specialised Radiology Cost per Age Group



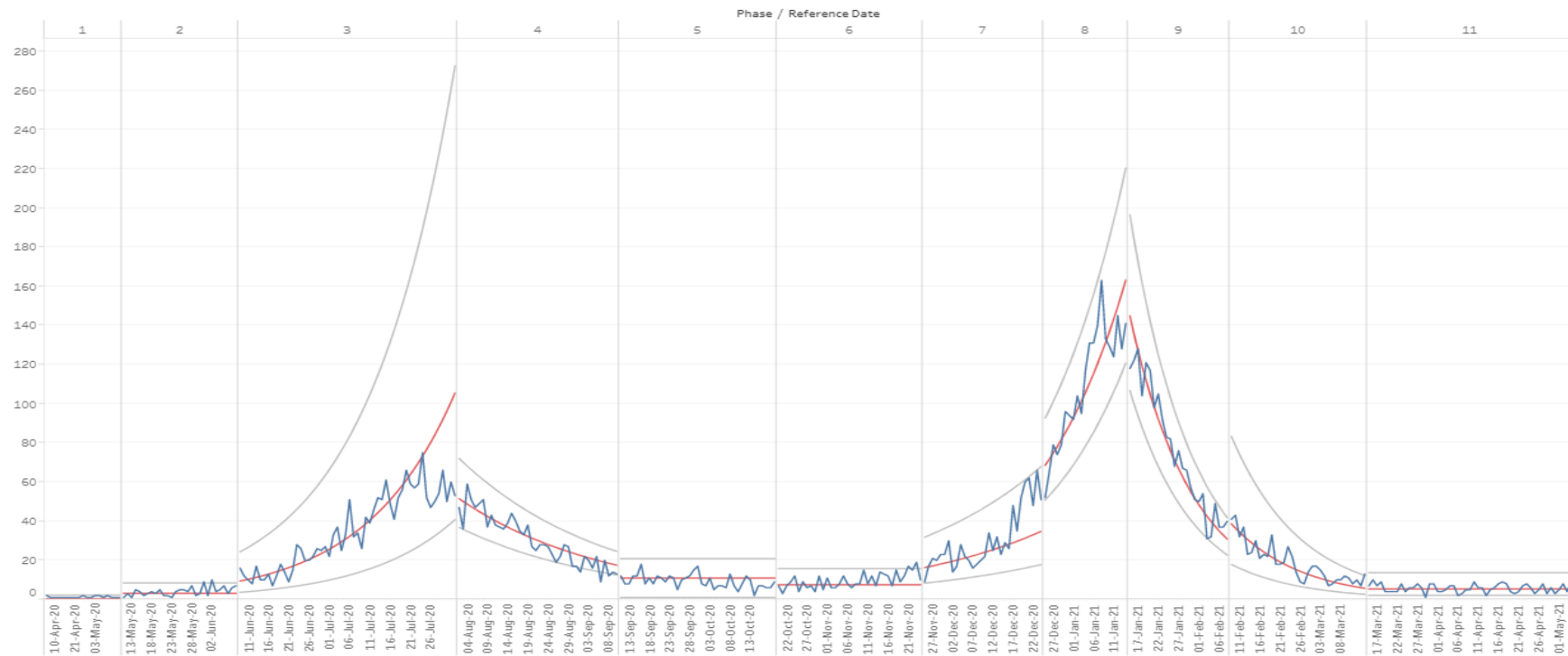
Scheme hospital beds used (per day) (by province)



NICD hospital beds used (per day) (by province)

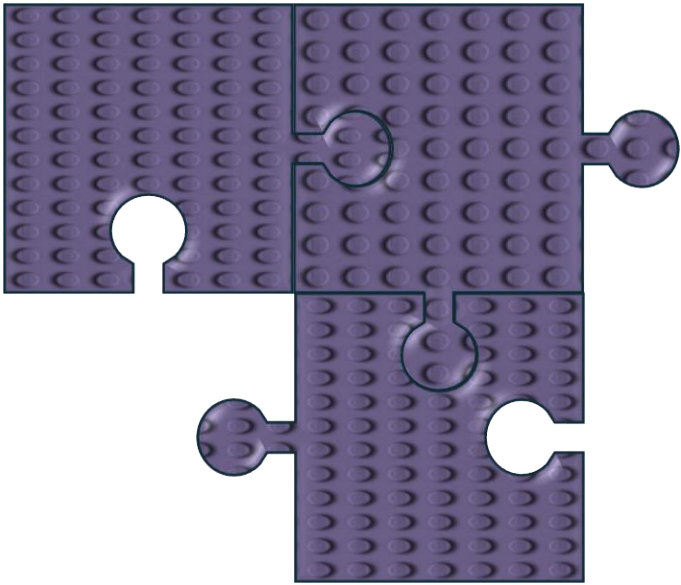


Fatality trend (unadjusted) – South Africa



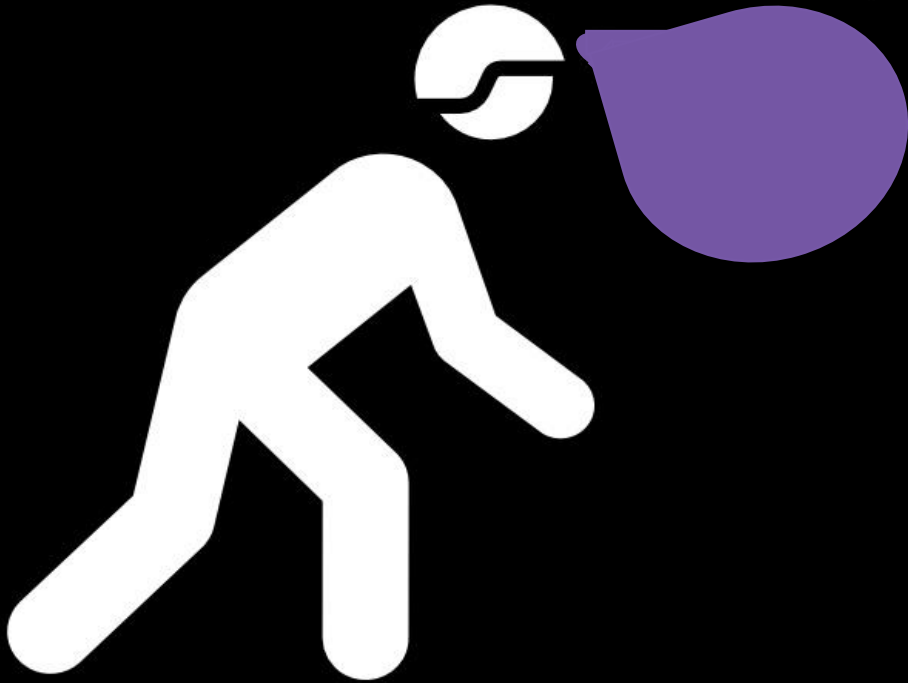


Summary

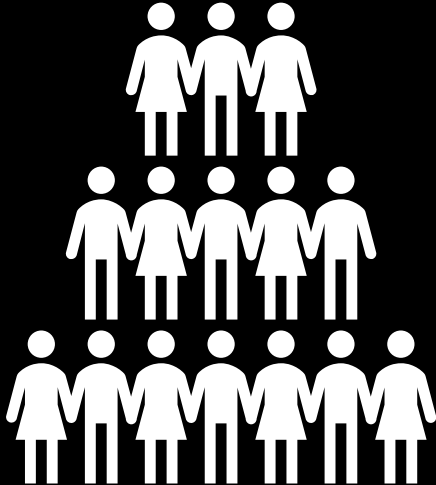




Trying to manage without data is like walking in the dark...you might get to where you're going but at what cost? A broken toe?



The significance of sharing data is that it
broadens everyone's view

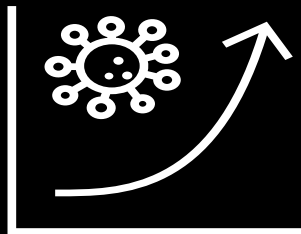


Data sharing and standardization allows us to address industry wide changes collectively

As an industry we should identify areas of mutual interest and collaborate

Collaboration

COVID-19



Fraud, waste, abuse



Provider Benchmarking



Voice of the patient



THANK YOU.

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