



COVID 19

A pandemic like no other

Effects on healthcare and Public Health

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Vision

To realize the full health potential of every human, everywhere.

Mission

Reform the global health ecosystem through the power of information and technology.



SARS-COV2 – a product of its age - the 21st century

- A pandemic like no other – one that largely outpaced the ability of the majority of countries to manage its effects
- Asymptomatic transmission - "Ebola was easy to manage"
- The interconnectivity of the global village
- The inadequate levels of preparedness that existed in the majority of countries
- The fragility of the social compact between some governments and citizens
- This continues to be played out very differently in different places with very different effects and consequences

Insights

Why such differences in outcomes and mortality rates ?

- Asia
- North America and Europe

Asia

- “If it looks like SARS , it should be treated as though it is SARS”
- PPE – In place, not potentially in place via “just in time”
- Speed of deployment – both managing lockdown and nosocomial infection
- Habituation of the citizens with dealing with “civic emergencies”

European and North American experiences

- All countries were largely unprepared with processes that had not been deployed in “times of extreme stress” but ones that theoretically should have worked
- Highest and lowest mortalities amongst workforce in Spain and Germany
- Nosocomial infections and PPE deficits
- Availability of ventilated Beds and workforce and existing biochemical industries
- Effect of regional structures in many countries
- Populations – some significant “trust deficits”
- Excess deaths - in some cases responsible for more deaths than COVID ...

What about the health systems themselves – Were they sustainable without change ?

- Populations – Ageing and multimorbidity
- Workforce - ageing and burnout
- Activity – potential “overtrading” and the financial consequences
- Metrics – still mainly activity based but with aspirations around transitioning to population health
- And then came COVID.....

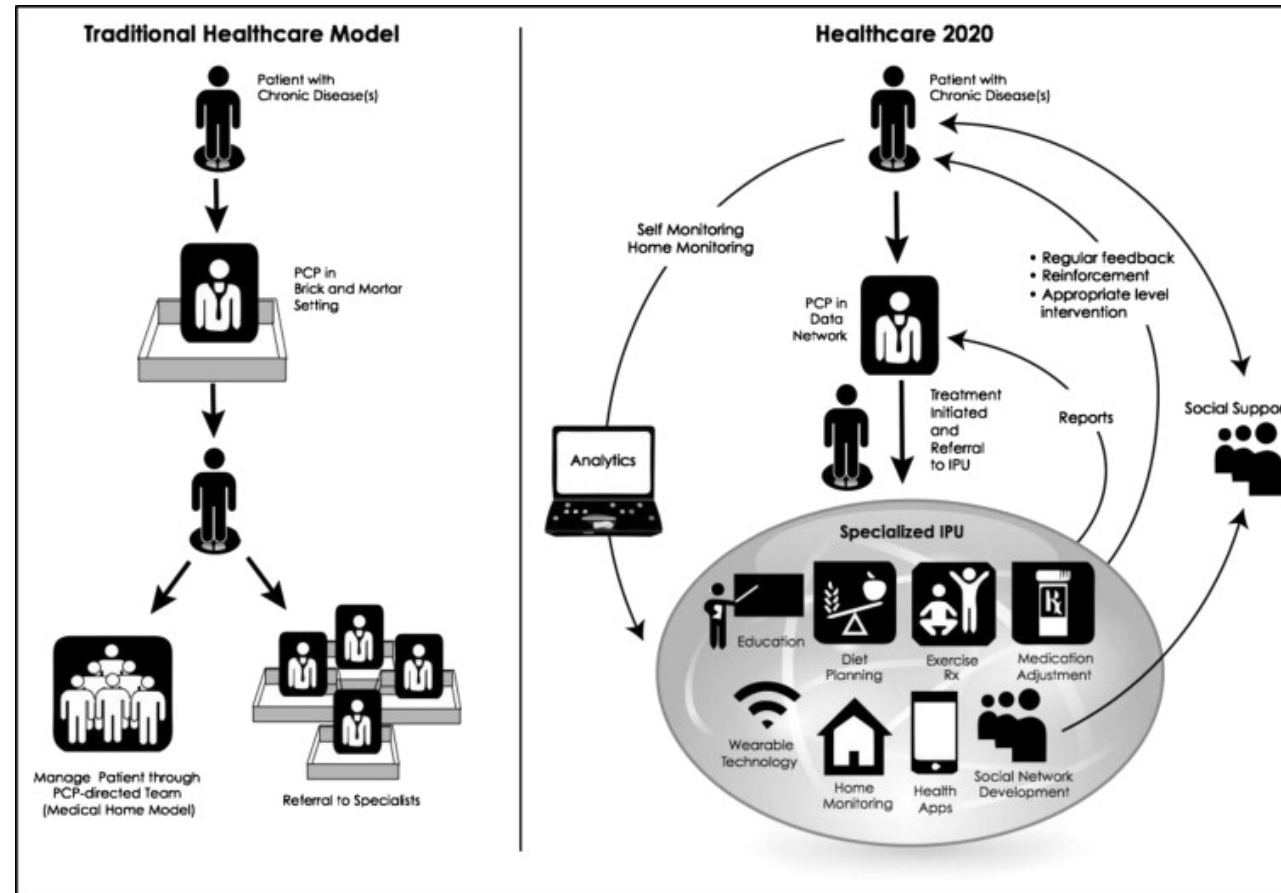
What effects did COVID have?

- Accelerated all the changes we had been witnessing ..
- Drove digital transformation at an incredible speed (face to face consultations reduced by around 65% in Europe)
- Forced the transformation of care around non communicable disease
- Rebased our perception of “risk”

What is the new world of the 2020s looking like ?

- The changes from analogue to digital are becoming embedded
- More emphasis on consistency of care delivery and management of unwarranted variation
- Workforce and burnout will remain high on the agenda
- The new age of precision opens a whole new world
- Secondary use of data and the nature of “consent” will continue to be major areas of debate
- Change management remains the greatest challenge – for us all

How is episodic consultation based care changing ?



Milani RV, Lavie CJ
Am J Med 2015

What about the new “public health”

- **Health Protection**
 - More emphasis on data granularity
 - Being prepared in practice as well as in theory.
- **Health Promotion**
 - Embracing the new world of the “age of precision”

The age of precision

- Precision Medicine
- Precision Health - the new frontier

Precision Medicine

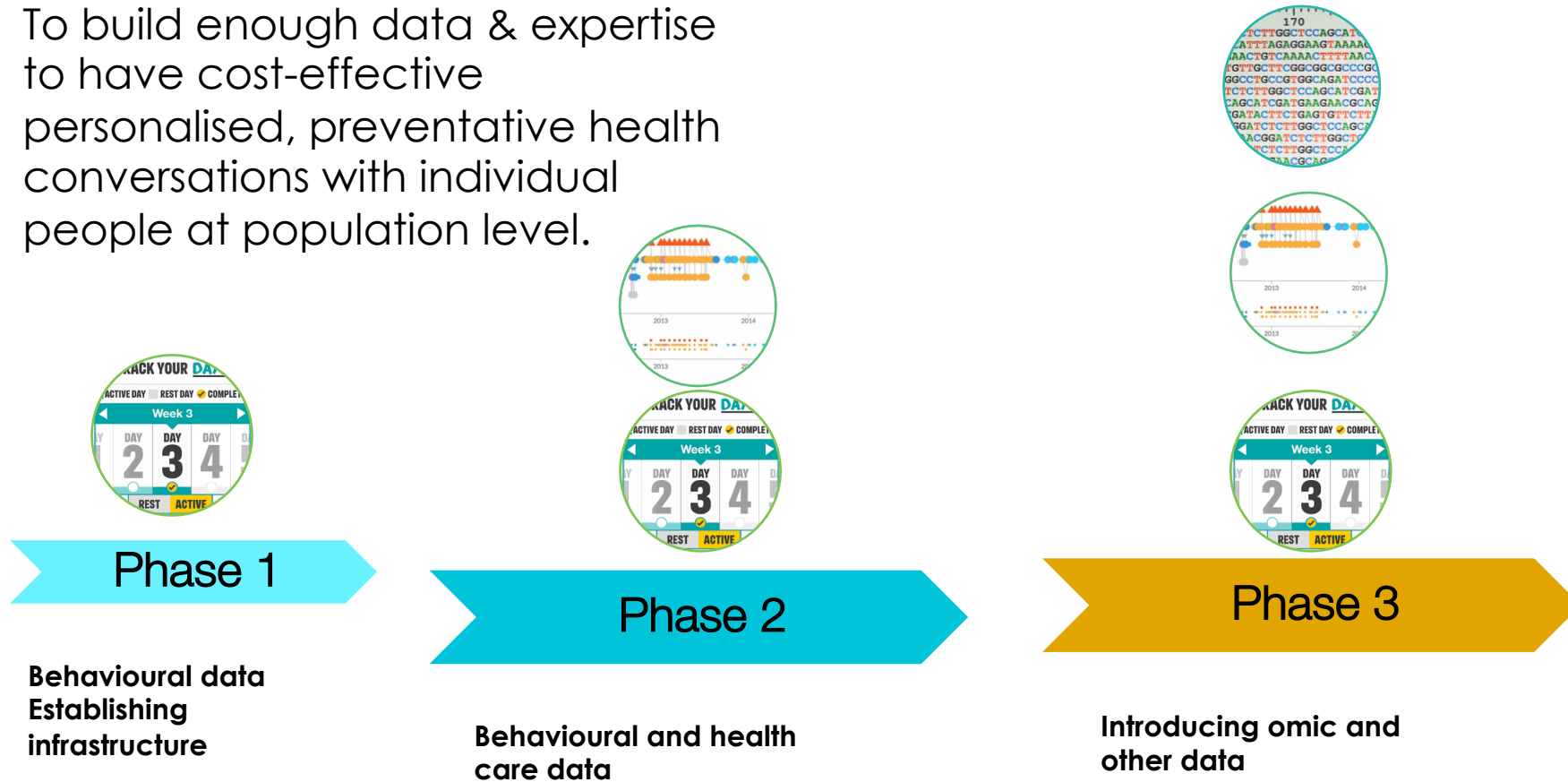
- This is very different to the medicine of the 20th century
- Adding in all the insights – together with the genetic and epigenetic and behavioural data can produce a unique personalised pathway
- The rise of the biologics - in terms of therapeutic interventions

Precision Health

- The process of driving personalised health and wellness to promote wellness and delay or prevent ill health or disability through direct and personalised engagement, using technology to direct people to appropriate advice, support, and interventions towards realizing the full potential of every individual, wherever they are.

The route and suggested approach

To build enough data & expertise to have cost-effective personalised, preventative health conversations with individual people at population level.



Initial data input & investment

Predictive prevention "precision health" offering

The biggest challenge

TRUST

“years to build, seconds to break, forever to repair”

Clinical management of COVID includes managing COVID and non COVID populations – both health protection and health promotion

- Essential we have the right conversations to explore dynamic approach to consent as well as the secondary use of data