

**“THE MOST EFFECTIVE
WAY TO DO IT,
IS TO DO IT.”**

Amelia Earhart

NEVER GIVE UP



Simon Stevens

No European system is going to be
able to withstand the demand.
Conrad, is completely overwhelmed.
We are going to have some very difficult
rationing decisions.

This is a staffing issue not a
real state problem.

Respiratory support is key.

1) Emps are 30,000 beds of the
100,000. But a stop to non-urgent
work is a question.

Stem's always for and for
you, you or you'll you'll.

2) Operating tables or recovery bays
can be repurposed as critical care
zones because they have oxygen
piped through.

3) appropriate supply of oxygen

→ 4 billion litres a week

20 billion litres a month

$\frac{1}{3}$ of St Thomas's fund into

respiratory support

We used to machines & the stuff

started to use them

the 4th (or more) people -

your clinical practice -

putting a face mask on & putting in

take down into people's lungs -

much more difficult.

look after people - a mechanical

ventilator

4) Study of machine
mechanical ventilators
credentials to people in the future

Dyson

193 private 8 & 82 private hospital

beds

1020 NHTS beds
specialist centres & various bays
you won't arrive

DO PA

Intensive care doctors will be
also caring resources

What will happen w. age-related

deaths

250,000

4000 adult critical
care beds

120,000 Ventilators

Oxygen concentrators

→ takes ambient air

→ takes oxygen out of it

It causes you a headache

in your own immune system

but releases fluid into the

lung

The requirement for all this -

to hospital is 2

requirements to oxygen

less 3 4

deconstruct the bottles?

JLR Dyson

Social care
my cash

→ Make sure we

different qualities of social care
social distancing

1-2 in people

- 1) us people
- 2) other bottles
- 3) people volunteers
- 4) Airbnb

ban public places
just banned pigs
no deaths

✱ highest rate per head
put at 100 pigs

○ getting it to Hyatt

Shi chaolet have a lot to answer for
someone then who has

we have named it
Lee Kuan Yew and more

rebuilding

Clear

a lot of pigs
and with 6 cuts

the virus it was out

g Whales

Swiss were public leaders

This won't
contract

Malinsbury
Epan

It was worked

Singapore didn't close schools

stay away from the work

We won't miss what it was worked for a year

We cannot value

UNAI - Scrutants

Follow have a responsibility

No to please people to come to work

Jonathan Blake

150 businesses

Scrutants website

Public symptom checker

Mark
Jawones

NHS 111

[free school meals]

free school meals

27th March - 10th April

Speed of disease

household size at home when?

how much of a spread are you?

Local govt has not been ready to supply a large number of people in their own homes

We spend our time trying to get old people to be active

Some people who were not being

— don't be quiet

— don't be quiet because we are not using

Local govt → Local govt

Mohita Jais

Judicial might come up
w. a candidate

If we do but we won't
prepare like some that
get in & get

Lord Patel

the point has to do
a career - want papers
mean

commonwealth
staff bureau
saudi DSGs

cut of ops
not cut
a proper way
As tribunals vested in
court

the phrases like
our personal agenda

Supplies

Schools
festivity

is it working

Queen

dentists 74

cars 179

Adlene wants to close

The union is saying don't continue trading

highlight a variable for key workers

childcare

education settings for key workers -

a framework of rights across working

infants work - school closures will impact them

the more

the more footprint

NHS

ventilators

98,000 acute hospital bed
in the discharge

16,000 of 100,000 oxygen

low-level packages

deferral of non-urgent

ventilator surgery

bar on all non-urgent ventilator

surgery

We also want to defer

11,000 anaesthetics

PPE

What inside - social care

gains

London

CRFs - ability to manage

What is

Economy

city is 2 pubs

Cowds

Queen

low paid
rent
rentways forward
insurance
talaways

- food costs
- rent/caterers
- schools
- mortgage payments
- children

Schools

May - June
exams

important

Schools are doing

must provide basic childcare
for key workers

— phys. centres & control centres
suitable school as

how to deploy key workers

- 1) It's not dangerous per se
- 2) It will reduce epidemic curve
- 3) But it will have an effect on NHS

tests

300,000 - get test w/in week or 2

Counts

Purers

Play friends

seeing help to
rose you here & there

James Jamison

we managed to
make some decisions we wouldn't
normally

we will lose cars
and put for adults
local wounds

Local for workers
support team to 6.5 team
avoid risk - fences

Meat & fruit

President & local authority differences
we are the same system
we are interdependent -
not for good or

John McManus
work to plan

John Brock
Reading

John Fuller
Local authority centres. & B.R.
orders. DBS -

James Bullock
Lead Commissioner

? By who?

Paul Margate

Izzi second - an angry
volunteers - we need to categorise
them

Jeanelle de Groot

D.T.O.C. delays transfer
of cars

Tom Hadspele

Nguyen Quynh

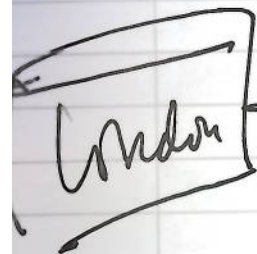
114 - we need have a
data set -
all the information by
end of next week

Don't forget

We must be more proactive.

→ We are taking too patient

We must give people sense of TIME
map



That should be
sufficient for keeping things
under control

MA

do list

State shielding

family shielding

What about religious rules?

re-emergence of

~~Case 1~~

→ all of these means

very

125 - 163 TCU

Macron
is playing
politics

Rishi

unemployment
 with yields
 core premium or on long debt
 greater than dev. developed markets
 it because we are doing too much or doing too
 little
 makes it very difficult to tell as
 the of this is to underestimate or in long length
 what means not be like

We should cut
own back head

SHIELDING

chubby planner

1.4m - a reasonably well spread
 question
 networked of NTS
 networked to a back of

website for (as people coding a national
call centre

Frank's move : 7th commission

implications for the reach

Supports being stopped at Calais
It's in the middle

regulation of validators

① Subsidy / bail out to keep afloat
Keep this locked down
We need to be down but US on back of it
My will not with out funds

② Areas like darkest pen
- we need to continue to be with
Need help where crisis ships

③ Industry - with measures
Take care

Utilization - Assets

Mobilization of PPE units
MSUS units

AGE

Measure and reduce RO - for 1

get it down but the questions
are being asked to
we need to get to 25%. which is
workplace

75% outside workplace
after a good bit of work that

we can't achieve what we want
decisions need to be made quickly

The question is how people are
complaint

Schools, colleges
Universities - students, parents, bars

non-essential critical - workplace
These are the 3 areas
we will not have data on employees
It's a hard decision

TESTING

(TOPE

→ ASHS

→ moving out to ICU
about some days

Working factor

Shirley has history
cancer, education SP
National

You should have
letter certifying ^{out}
what you are doing
sincerely

Employment
Appar

Project

Thompson ~~case~~
bail - out

Quences (TU) capacity
there will be moments when
TU capacity is better

Ch.
Mitts

Simon S. we could shut 5 days

the wedge really opens up
transport options

we have

LONDON LEAVING

Eddie's

Malthouse

Greenhalgh

high on impact

(ambitions

A lot of businesses will go?

banks

not

London

we used to have the dead

shielding -

lots of people have followed it

Saving

message - we need simple message to have

clarity

social distance

zoom system
→

message carrier

how to get a message across
stay at home

People feel to have to work

- more important to get means
- money is people's priority
- low income jobs

Tub cases 30% →
travel is to CA 2 down to 20%.

data London is about 40%.

buses running at 60%.

10% down is the real

Bans, standing, cut cases

Paris 2000 plus

Milan police enforcing a ban of corridors

54 distance } families for up people

Police distanced

we put heavy duty to reduce
some lines

we are able absolutely to secure
eyes

We clearly put it in advance

Most people are
then about
going people

No been more than
We're in good trade w. velvet trade

Key workers

every animal
prior
Keyworkers

takeaway & deliveries

Houlihan

Rishi

Ready to buy our bonds

That's before the tax receipts take a cliff

The wage scheme

And it's very nervous

If we can't sell our debt
If we can't sell our bonds

We can force but banks to buy our bonds
We did it in World War One or 2

We printing the money
Or we live w/ in our means

The public sphere will collapse

The consequences

Take some time:

All non-essential outlets to close

10/50
50 - 100,000

Trading system
so we can
trade in real time
3 days

These
will need
we are
in different
si

Massive increase in testing

$\frac{25,000}{200,000}$

increase testing -

run up clinical trials

a big genomic group
across the UK

showing how the virus is spreading & tracking

then Btchley, death of germs
Sanger Centre in King's -

sequence - looking for
mutations

tracking for mutations of viruses

help to evaluate surveillance programme

If you increase tests
you get back to work

antibody test

apply test effectively across
the workforce

Blackford
Liz Smith Roberts
Alison Campbell
Jeffy Donaldson
Gordon Lucas

opinion for power in 6 months
Measure of scale of growth, but can lead to
take responsibility with power

If we set up anti corruption, we can do that

① Massive change
→ good relations w.

MPs key workers researchers & case
workers

they can do it from home

Alister

2nd sector self-employed
people who run small business
low growth - how you get out money out
How can you engage that workforce
flow of information

dedicated people of quality
flow of information

Jeffrey looking to what the Chancellor
will say. As Alister mentioned
Must bid income - the meaning
Unemployment credit - 6 weeks delay for
assessments -
UK wide scheme -
develops and is involved

Liz How does it get to the
bank accounts - If we can't
do something innovative
tourism - Health board & general
measures 10% of gpc of ill
some sort of code so
people stay at home. Social care
workers 20% off already.

Ian none of us have paid
up yet like this. I'm not going
home.

Economy - 17% of GDP

Infrastructure
France Dungeness Castle
1.7m people who could be
been jobs -
employees were with the post up to 100%
grumpy about - aviation - fuel
statutory sick pay

Great
→ means

→ dramatic effects
→ we will look
after

→ become back it
→ people need

process
UK wide
social

relax

Curry

hospitality sector
this is desirable
a life sector - a
it's
the aim to people don't
go - we do need a
order to close
pressure on donors
so that 5 don't wriggle at
after requirements
very guarantee

National Insurance
colides

supply income doesn't
cancel (to x
system

Grangemont down
closed - 2013 it's
of the strategic importance
parts of the plant but
not in the future
81% of the economy
a work has been
done

we can but
continue we have
in
65% of the
and fuel 12 15

Our ability

London going up at rate of. and expect

severe cases a 2 week lag
this is a reflection of 2 weeks of

We haven't seen any impact
we have not seen a change - curve
we have but doubling time means
faster or

aim is to make sure that ~~individuals~~
ITUS } are not overbilled
ICUS }

We won't know for sure whether
means are sufficient until ICUS are
closed

Of the modelling is correct or if
people do what is asked, we think it is
Biblical with - overdone it
or underdone it

Our package will provide wage subsidies

Rabbin Hammond TUBE

70% reduction

Compliance in buses
11% reduction

Social Interact - Royal Palace, Preb
80% a week

58% say not doing

We could talk about a
staged release

point of what we
said on Monday

Museum, galleries

Public health and
Met & London

pressure on demand
→ appeal to people

David Potts Morrison's: likes food rising quickly. Foodstuffs. We have
seen a 57% in pre-crisis (2000) 140,000 Cans a week → 250,000
Cans. What are some cases like. If you have 200 abt - 6000 people, y
ou pick - some stock prices or buy it in our stores. 96,567 - our core purpose is to
do the full part in feeding our nation. For the last 100 years - do a job
Business Relief Tax £290m - in state aid. Only half that. 9 to 10
pennings

My Whatfield for Corp: public must acknowledge the vital role that we are playing
required to. Need police - must keep our stores open
Guaranteed.

Reper Bunnies: Asda & the food works vigorously in community. We have
just over £1bn each has not been consumed. At the same point
to the toilet all water used. 20-30% of calories are consumed
in catering. As an extra-curricular activities during our last

Richard Walker (Caled) studies of sales growth. High business - UK to
take back to more sustainable levels achieved. Needs my
supply chain. not work

James Convenience stores - got hit later - delivery. Make more
delivers - We actually can deliver. Different who

Tim O'cado working time regulations - absence billing up to 10
hours - Also being offered shift - temporary release

Reper Thomas: slower sales growth - peaking in morning. Much slower in
afternoon. How resistant UK food

Jan Wright: 1/2 million; hidden losses, Thanks to govt for leading industry. People struggle
even though to have been given by worker status. Drive home by the supply chain
Partner

Christian LIDL - Peak is slightly behind us
3-4 weeks - key sign of improvement
in a lot of people are in the store.
We have a demand problem. Normal

Dave for TSC : what we've seen in Europe markets is
in Ireland - 16 hours people can work under
in ESA

Helen Dickinson : all the legislative changes have been great
coordination for the devolved.
Clarity a good service & redundancy

Sat March 22/02/20

Topic

Parishes

Holidays

Further advice

Battle plan

Are Chinese dying?

Why German numbers so low?

What about G-20

Number of ventilators

PPE equipment

Why should we not be on Italian path?

Self-employed - can we help?

Are we helping ~~from~~ the Melan business?

Swine flu? What is happening?

Testing? - what is the story?

How do we compare?

ITU numbers?

Are we building to face further work?

3 route battle plan?

What is the doubling time?

Schools

Timeliness

Chris Smith

As long as the R.O. is slow
the incidents is have people responded
People have definitely responded - but is it enough

They have managed it
by having on

Take the social distances measure seriously
Don't take the social distance

Theresa Coffey Social distancing : It's starting to sink in
people going out to 2 hours for dinner
ethnic minority groups have not reacted to message

Rate in ITU are higher for men

75% support the policy

Message outside London -
One message in parks / one message in public square

don't all retreat in London
There are too many

20,000 beds spread up
8000 beds in the night

Shielding: Letters will set out the
particular clinical reasons
why to intervene w. cancer

Model hubs led by local authorities
data
military planners

- Medicines
- food bank supp
- most will get in from food distribution companies

This is the most efficient way to do it

They can do it to plan

First parcel by end of next week

This

- Up to 1.5m - Cancer
- rare diseases
 - last stage disease
 - cystic fibrosis
 - pregnant women w. heart disease

Do not leave your home for 12 weeks if
your instance - if you have a cancer to need to
look after you if you have symptoms

(for terminal care pathway, etc)
We will start plans like this for 12 weeks

website for care - automated phone number

DWP site - live call centre

automated

We will be sending out details in a letter

The letters will be on Tuesday morning.

The letter is

The coroner

1.5m
or 888,000?
~~letter~~
creeping?

Units in the English - they are complicated

NKTS & resistance

Notes

~~Yellow~~ All vit is being done to you
Not being unbalanced
blue - all bars

Mechanical ventilation

We must get to 9000
London size plan

a very big stretch
We have got 40%
compliance change

Excel - w/d it work
build out for NHS facilities
More are doubling or tripling intensive capacity

12985 ventilators

we have made progress
but we need to cover the yellow bulge

We have just stopped a load of doctors from
doing some tests that are now useful

3 essential

antibody test

antigen test
test

shortage of reagents

potential COVID patients
we are trying to test capacity

120,000 a day

domestic manufacturing
of reagents

Enzymes widely available

John
Spivey Oldfield

<ul style="list-style-type: none">- ventilation- people- beds- how to get above	<ul style="list-style-type: none">- 1/10 antibody- antigen do you have it- markers -- reagent
<p>Distances</p> <p>100 → swimmers</p> <p>→ ground distance</p>	<p><u>Reds Swedes time 10 days</u></p> <p>in cd</p>
<p>Printer / Group</p>	

Selig / Grant

(Vik)

medical
director
for London

David Sloman

(Steve) (balling)

Monday 23rd

London plan
3 day doubling curve
199 critical care bed

Collected for a place by 10 days plus
opening blades & recovery bags etc
ventilated capacity
The anaesthetists

Open wed week
1st part of Exel

Re Abis ship hospital
Cancer patients Barts into cardiac centre
predictive costs bag

800 500 for covid
New to Sat

Sat to Wed

post Wed

Hillside 9 bed critical care unit. 17 beds
already for patients in theatre & recovery areas
super surge
Droptail ward & acute medical unit very
few beds can do surgery - so 35
Team of anaesthetists

Hilston speaking

35 - massive amount

critical care course we have to look after 8 patients

Barts / VCH / Guy's / St Thomas - have more ICU than
multiplication etc

Barts can consolidate & use Neuman & Whipp's Care

Guy's → convert over to new
Lane - Fox unit

To get to 35 at Hill due we would need to draw down on
national stock

should be sufficient

project Nephrole

If you have an experimental case

Serket / Wides likely to fall out first

Staffing

1300 critical care consultants

4300

gets medical students to sit by patients
intercalary roles

Intubation -

1) sub by machine

2) do surgery when patient is anaesthetised

anaesthetists

are permitting doctors to work at a level of
risk they would not normally work at

We still need people to be in a deprived setting and as that setting
It isn't just ventilators
It's the

Debt rate 70 mps
327 debts

Week's

When that is met we have cash

1 more week before we can tell
whether

get the R below 1 P. balance

compliance costs as high we can't believe

we have another 75% but if you get 85%
but better

They has got R below 1
If you look at the places it is with about 80%

Actions have had a v. significant effect
(due to CTUs less risk is too small)
The more we do the better

Chris Whitty - go to be done in a sustainable
way

The more they give all the Ceq subscribers -
Until we can get R1 - you need to have a
lot of dreams

Transport → a lot of rural areas
don't go to your second home

improvement package

Parks, rebuilt, the tube

Tube rammed

Arab : we almost

[schools] head teachers have been
implementing but getting

revenue up to 10-20%

Some stories of higher populations
that are blown off

There.

but parents to be a by worker

Statement

We have the threat of ~~the~~ people dying
We have the threat of even more people dying. The NHS tells us
we have never before faced such a situation

We have to balance the long-term economic damage to our system
- an increase in poverty and disadvantage
as a result of the steps we are taking

So in the current stage we pushed the
outbreak beyond the normal period of when the NHS

If you get treatment if you get helped
the mortality is below 1%.

But the potential dangers

We don't know how many people are infected
If it is higher the mortality rate might be lower - but we don't
know

We need to protect those most at risk
we need more ventilators → more drugs
we need to be able to test

But all that is secondary
we need now to slow the spread of the disease

The disease is growing exponentially
we need to stop it in its

Over the last two weeks we have brought
in a series of measures

It is going to be tough
I have definite belief in this country's ability to
recover

have some / important things like that before
government ~~at~~ at all levels it
needs innovating

We can make a big difference with testing
We can use antigen testing after NHS workforce
~~to test~~ - If so that we can go back to work if we
do not have the infection
y

We need to stop people spreading it and the
country

It all depends on how we do it
how strictly we obey

You can't

We have a concept of freedom in this country
but it's different

You are free to do anything unless it
is expressly forbidden

Today we have to turn tail on this head

We should only do things that are expressly allowed

You should go out once a day - to exercise
You should avoid the people

You should not socialise, have parties at home

We cannot take the risk

Some people are letting everyone else down

We can fix this level it with rules from

I need to level with you all that
sometimes

There is simply no cost free way of doing the
good businesses with pounds

You can make money -
Cyprus is an obvious example

We need to stop the exponential growth

All epidemics come to an end

We are going to need

Humanity does fix these things

There will be real upheaval

There will be economic loss

There will be shock

Let's hope we will do everything to protect the
most vulnerable

We are protecting the most vulnerable
There is something magnificent

This is unlike anything we have seen before
in its ability to infect and kill

It is deadly

because it is invisible

We have to take steps to stop it moving

That means real damage to the economy

You can't disguise the shock

but we have no choice

... a great outbreak of this virus has gone on last century. It is an
 early in some way crumble the bombs - because it is inevitable
 or because we ourselves are spreading it. And I want to level with
 you again about the numbers. Unless we contain it, unless we
 direct the spread, this disease has the potential to carry off not
 just thousands, but tens of thousands, and hundreds of thousands. I don't be
 clear with you about this - and that is why we have had to take
 the extreme steps we have. Because it spreads so rapidly between
 us, we have to stop doing the things that depress us as human beings.
 We have to stop being so social - at least physically. That is why
 we have had to take the steps we have over the last few weeks -
 at every stage trying to interrupt the disease as it spreads - and at each
 stage trying on best - on the basis of the science - to ~~act~~
 make the intervention when we judge it will have the most impact,
 not too early, when the measure will be ineffective, and not too late.
 And at every stage we have had to think about the double threat posed
 by the disease. There is the threat to all of us - the threat to our own
 families. And then there is the threat to the NHS, and to our
 ability to provide enough beds, enough ventilators, enough intensive
 care units, enough staff. And the risk is that because of the NHS
 is overwhelmed, the number of deaths will be greater, potentially
 much greater - simply because people will not get the treatment
 that they need. And so it is absolutely crucial in this campaign
 that we do whatever we can to slow the spread of the disease,
 to give our NHS time to prepare, and to save life. That
 being, in the last two weeks, we have asked people to work from
 home if you possibly can. We have asked people to self-isolate
 to ~~go people~~ ^{leave} households to stay at home if one
 person - we have closed schools. We have ~~closed~~ ^{asked} businesses
 to close. Pubs, bars, restaurants. I know how difficult this is.
 I want to thank you for the courage and forbearance -
 we are still behind you with absolutely unprecedented
 economic packages. We are backing business but we
 are also backing workers. We will get from this but we
 cannot minimise the damage this is doing - to people's livelihoods,
 to people's jobs, to their dreams. We are a united society &
 so unflinchingly or unflinchingly bear the cost - because
 the objective is to save life, and so it is absolutely vital that

We do it to get it and that we make sure that our collection is worth it. We must make sure that our measures will be worth it. We are making a difference in slowing the spread of the disease. But we cannot not be sure we cannot know - and the risk is that in a few days - the NHS could be overwhelmed, with the consequences that we have described. So now is the time to make absolutely sure that the measures we are properly observing - to make sure that now means that the must be enforced. We make a distinction in this country between our attitudes to freedom & those of other countries. In this country we believe in the old Anglo-Saxon concept that you can do whatever you like provided it does no harm to others & provided it is not forbidden by law. ~~So perhaps~~ Now we need to shift that. You should stay at home unless it is absolutely necessary to go to work. You must not go outside except to take exercise - you must not socialise even at home in groups. You must not go shopping except once per week. That means non-essential retail will have to close. I am afraid we will have to enforce this by law and we must be determined. It is not fair on everyone if a minority of people fail to insist, or fail to take the steps necessary. There has been a huge effort at compliance - but we cannot take any more. No one wants to enact measures like this - but there are simply no good options - or no easy options. The way ahead is hard. It is bumpy. But if we do it will mean real ~~benefits~~ ~~benefits~~ such a sacrifice if we are to get our economy back to health. We can see a way through it. We can turn the tide by doing this. We are losing millions of jobs. We are in the forefront of developing medicines - which is working with countries all the world. We are producing the number of ventilators & electrical ventilators. But eventually we will have to turn our attention to dealing with all this. But we must

23rd March
2020

We are entering outbreak in the countries
UK govt - asking measures that vary by area
Confident that British people will comply over time

The outbreak is technically surprise. It is like a devil. It suddenly
demanded a solution. Still working on where it came from.

Once experts confirm human to human transmission - we could slow Wuhan &
stop it. It is outside. There are but no better options. Now
we control. We have got 100,000s of people for being infected

What is Wuhan?
What leads to
stop transmission?
What happens
next?

Next markets?
Data →

AS of Wuhan epicentre - appears to make sure early
testing & make people tested. Always lack of
testing materials. We succeeded in identifying patients
New hospital. Confiscated civilian use facilities.
Sufficient food supply. In 2 weeks state should
under control.

Zero cases in Wuhan. Flakes here yet. New cases of
COVID-19 just nationwide. Extreme caution to prevent
against a rebound.

Working life now back to normal. Previous reported cases
from overseas. Progress of reported cases. We should
be working even more closely w. UK to ensure fear of
people disrupting trade

Understand grows 80,000 UK with outbreak. 400-500
a day. Deaths 3k - no big change. All this
advised as a matter of medical resource

Now for 42,000 staff nationwide. Global medicine
helping - one of the unique symptoms of China

We get previous support from UK side
We still need protective equipment at home
Much needed equipment

Prepared to have prevention of bird disease

A Gap under working study

A lot worry about how children - take care of siblings & others. Pay attention to this issue

Police: The biodiversity conference

We will each play our part & we expect each other's views.
We will ask the relevant agencies to step up their efforts

There is indeed the possibility of the transmission of the virus by wildlife. Yet to be a definitive answer.
We will step up our researches answers on these issues

The virus lies in understanding or identifying

But if we work together that we can overcome the virus

Q20 and our own mental state. We have to step up
approximate science & approximate science - prevent
transmission of the virus. We need early localities -
Get deep & vaccines. We are optimistic but sometimes
we will put vaccines into clinical trials. We

We need to let the WHO play its due role. We can
work together & test reagents. We have products
ready.

Material assistance from countries - 80 countries w/-
leaders of our abilities - We will have opportunities to
work with our partners.

Macro-economic syst. Keep supply chains open.

Page
Pabody

ITUs are also trouble
giving 7-9 day count to
ICUs w/out the
increase in capacity

only 599 used for count

R is 2.6 \rightarrow 2.8

looking back 2 weeks
ago

no doubling rate "

3-5 days

looks like same -

France, Germany, Spain,

UK

ONS may of the
measures have
been taken seriously

3 areas where low
values

52 have reduced
surgery

47% have what
funny

53% when ^{contact} with

63% the count and
surgery

47% for surgery

when you take ICU
numbers

does not work

We are below compliance

considerable uncertainty

about what the

measures will get

you out of trouble

on ICU situation

So we need to measure
compliance if we

can be pretty confident

We haven't taken

the absolute level

large food stores 80% higher
portfolio down by 80% in 60s
allent

restaurants spending
entertainment, spending

direct effects of deathtax per
consumers

gets the R to 1 or below
we can say we have stability

Until we have control

~~R~~ We don't know what people get at
with symptoms

open glove

What can't stay open

Synthesia

Patrick Villano

trade - fl - repeat
on credit

R value 2.6 → 2.8

double number

France, Germany, Spain - welcome looking back in time

intensive care units and come with 25 people

with 28 people down 28%.

likelihood

travel in period 60 y.

52% sister says for

47%.

regional
fleets

break rows into
epidemic outline
intensive care
couple

May R value 1

the state - people - lot of people about
the business for the

we are still business interested to

Subur centers

Casinos borders

7/2
→ sitting
Mark Hewitt
Pati

0% of staff self-isolating
nursing a sub service

Praxis

employees required to do

CONSTRUCTION
WORKERS

Mass tests mass publican

children

Nicola → construction workers

~~Widened~~

Caravan site

Vulnerable groups
shielding - free school meals

Easter weekend

Steve granted funerals
construction workers

It had only be essential construction
workers not social

have seen shift in
supermarkets to deal w. social distance

perhaps go ~~part~~ self, employed
credit unions

Justice enforcement & DATA

clarity penalties & deterrence

once we have both clarity
it will have an impact on

Maintain the relationship w. the public
which penalties

Make both leg. consequences for police officers

We are 10% done

We are going to see different crime trends &

George Floyd

no more than once a day
cease

→ we are doing down on

→ police MTS

→ save lives

→ we will

Thurs 29 March 2020

doubly line
pharmacies
LRF - dealers
ventilators
ICU beds
respirators
inhibitors
AS hly
when is the under going to

Index

Skinner
90 deaths

Specialist care nurse to 6 patients
non specialist

1 consultant to 30 patients
when working for 500 beds at Excel

Queen Mary Hospital - no touch w. opportunities in clinic, IT, Matrix.

The people will be pre-intubated & transferred
we have for ambulances, any, intensive care team
It is scalable to 4000

33000 people - working 48 hr week
4 days a 3 days off

Inclusion zone and core facilities
Pneumonia, COVID-19
8000 visited cases

11500 clinically significant cases
public staff from across all London hospitals

We also have 9 sites
Barnet, Barts, Greater Manchester, Leeds, Plymouth

Oral ventilation

Most people stay 10 days on a ventilator
 $\frac{2}{3}$ live, $\frac{1}{3}$ die

950 any medical

Ben Walker → nursing the volunteers

people not caught
but shielded

Governor of California
1200 ventilators from
China

600 for China
FCO

3 supply
8658
9750
12

3.5 m antibody test
test whether you have had it

Have signs w. Abbott for
71 m of test for
shells w.

Thermo five years
you take a swab for someone
you go to a building in

Therm system is doing its job
World is not all of swabs
cotton bud tips

Q tips
reagents - but chemicals
needed

The thermo paper

Paliviz

R. Bell

treat & prevent

vaccines 60+ credible vaccine

preparation 10

Coalition for Epidemic Preparedness Innovations

Moderna

- messenger R & A vaccine

but technology but not yet as adopted

2nd vaccine

will go into clinical trials in April 2020

1) Do to work

2) Manufacturing capacity

by around looking to site manufacturing

Meeting to CEO level - put some

Millions of doses by end of year

Drug

2 trials chloroquine

hydroxychloroquine

as one trial proves you move on to anti-malarial

low dose steroids

anti-retroviral

to try reduce mortality & shorten time

1) Advice to stop & plug severe

2) antiviral for severe

3) antiviral for severe cases

10 pupil to teacher ratio of
one to one

We will have some challenges
on PPE for teachers

less eyes & clean

cluster schools as best as possible

vulnerable children

4 yr old w. respiratory course
ventral major hospital

prior
washers

69 dealers 2000
425 - r 6843 cars

~yü stratejik anlam

Indirect effects because we postpone tax
payments like people —

4 ways out : 1) natural entry & exit
systemic
→ stress

Matt

supply

Technique

Rob Jurek - student proposed
for to be wood supply

letters are leaving folders

have job tough
teens are going to play a

Rishi - delay CSR
focus on an response

regulatory easements
competition law

Michael - transport
rail

tube - gov prepares 2 tube routes
DWP

don't overload ~~the~~ get more out
quicker

beds must be kind to business
not

support at a time of pressure
particular challenges for business staff

decisions to people

DPM : perm. gov permission of that
permission to get better out from

France - an issue w. industrial
action for ~~the~~ P & O

doubt aspects w. call centre
advertising vulnerable
centres £24m
£216m more
global need & £156m

recons
- increase opportunities
→ would need to
get 25% more

Xi Gao director
Euros

all parts
super immediately
we will work

→ end
→ baggage

→ to help the
the go

→

opportunities
plans
we will
Gillian

about 1000
of the bank into the
system

review
26,000 applications for
UC

PIP mental health
reprogramming
we don't want a sign
of people

There is about 100
unemployed people

Under was a case
50,000 parcels

PPE second case
green death plan,
housebuilders

~~the~~ ~~the~~ opportunities

vacuum

10 y. deep across the
world
supply chain

Adapted to the

preparation in low volume
change in industrial
costs

fig. Three : confidence -
ideal trading

System. we should be looking for
similar worried about
change in trading system
commitment to free trade

fuelled : we are producing less
than needed PC Harper

Brandon NI

\$V-S-C-W
needs

id
question

How many new hospitals?

How is Lynn's new ventilator? Can I see one?

Is that new vaccine going to be made in UK?

PPE for care home!

PPE for prison workers

hydroxychloroquine

Have we got the right Sunbs

Have we got the reagents

When can we have the app (aundel)

How many critical care beds still blocked?

New protocols to stop bed blocking

Is it easier to free the elective beds than to kick out the bed blockers?

What are we doing about volunteering?

What total ventilator capacity can we expect? ^{By when} 12,392?

for hospitals - not just London
quarantine for people coming in
tube - take over - was on Sunday
the Oxford study - the asymptomatic
Richard giving
construction workers
testing

We are doing an average of 600
let me be to today as last
sacrifice for to protect the N
save lives
But if we make too much of an
economic sacrifice we will not be able
to protect the NHS

24,921 empty beds =

40,000

high dependency is a loss

What if we 3 day doubling time
patients? → then we are stuffed
The original data were showing a number
patients in intensive care
661 in critical care
580 in intensive
373 on ventilator

It does look as if we should request
for ventilators.
Week of 13th April - so we need to pull
them forward.

They will have slowed the doubling time
ICU numbers
The number of cases is not
the people doing similar trips
The numbers are rising but not at the
speed they did before -
the river is going to carry a rising
people being symptomatic
We won't start to see that properly
for 10-14 days.

Squinted

We need to make sure
people are staying

do over of the
the last year's period

$\frac{1}{2}$ a point

Northville Road deal reported 46 deaths
by having available ventilated beds
right now
61 ventilated beds by July.

Melt

PPE distributors & and
concerns

find that we have had a
prob distributors it

of further risk. place a where

FFP3

We need to test it w. a volatile
chemical. We have a prob. w. the
supply chain

hand sanitiser

Bacardi sells but not
w. sanitiser

livers

supply chain - how much for
probs - how do we understand

we have eyes

There is a green

subtle differences between on lot &
other regions -
that's heads shape, size

measures are a higher spec
than WHO spec

agencies or groups
sorts of stuff

doctors & nurses are at
much greater risk

bottom down reduced to
stock - different for
of the chemical

Sucrose

People wanted to
overuse

The stockpile

50 cals & 1700 units
53 cals

45 stuff

We have but but any
redesigning logistic chain -
parallel supply
Darely - MOD warehouse
a Darely

Any correlated supply supply to land
100,000
FFP3 mask in Alderley

How to do & do PPE
7:50

ventilators
6000 confirmed orders
8000

We are not stopping purchasing
some of it has been successful, some
hasn't

engineers bring it up to open
currently lots produced
a small tent

Penton ^{North} - engine manufacturer
Smiths shielders - Illipe

We are not buying caps down
this engineer is much more

Xi
Terry

Steve

Individual groups who need
for
symptom tests for patients
they work

tests for patients NHTS
labs & PHE labs
we are worried about critical supply
points

teams working to get as
much as we can

reagents - Ye & heur the
enzyme for RNA.
Global short supply of reagents
We are trying to validate alternative
suppliers

Even if we do get all the
reagents we wanted the
form we get phase 2 a
mean

Drugs - Bost
Thabistue s

SWABS need to be sterile

They put it in someone's nose &
you have what you need

A bit test is worse than
no test

getting the picture up
trying not to be accurate

See antibody test
no repeats

Wed pm.
complacency is the enemy. We have been
complacent before

Can't. Thru

March 26 2020

Thursday

Universal credit up

Clonk
John Spiller

Keep the airports going
(20 - 200k flights in Spain)
Today, center 10,000 flights
in Spain

Need to read
80 per per - Casco
ECO - Opt wave control card

Australia, NZ, Canada, Thailand

Singapore, Dubai, Qatar

Large multilateral

Call centre
gets dramatically down to

under of unanswered calls
orders - we will support
your plan into a
destination - need to
get that right off to the
advisors

International group have
equal shares

reinforce vulnerable countries to
prevent spread. A job to
prevent the spread

- 2) nurse & vaccine -
- 3) supply chains

profit plans

It could affect closure of supply
chains for medicines, food
other supplies

The amount of drugs & medical supplies
c) nursing small

Under 0.5% -
that's what drug when we
get control of it

740,000 Bunkers and cars with
640,000 drugs now

It cannot afford to be doing flights
around - 1000 a 2m
2000 per day

Freight flow - we can
create a
prob if we stop the ports

Grant: 2 support for Chancellor's point
We are negotiating w. a dozen different
countries w/out a standard package for the
le

The medical view for the
time being is if the health system is
overwhelmed.

The country is not to
but challenge

delivered 6 cycles cycles
ventilator

constant supply

(7-24 year olds)

Simon Stevens

1600 ventilators by 13 April

Prudent modest worst case scenario

But what if people quit sooner time on a ventilator? You could get the ventilators down to 11,000

if doubling time is 4 days
Matt

This is at a maximum

Let's aim at 18,000

But if it is 4 days plus
weeks

Stevens: Sutton / NI will not face same crunch point
Matt

Time of ventilators stored, IPE as well.

26,894 beds wants for corona patients
date about to come back

Feeling pretty good about the first patient in
Sutton
multiple

Bentley hospital is doing
More hospitals in London will have

They will have been substituted & substituted.

We are stretching nurse to patients ratios

Oxygen maybe not till wed. BOC using ^{cylinders} tubes

Matt difficult to get nurses in

larger issues of staffing

We should ask DAs about whether they need a
hospital

SS

We want to proceed w. physical build out of the locations
when the time on is down to trade

8000 more ventilators

Steve Oldfield We need to get
to China

China Medeco - Beijing Formed

2000 machines

We may be able to get them earlier

Purton, Sun, Dyson

Steve Oldfield

We are not out of the woods

but some places are still short of need

Hazards

several other masks want to second care

We have a well-substantiated process
energy supports a place

Daily PPE call

National Chinese supply route do seem to be
opening up

We are now able to place orders

S-1 FFP3 face masks

400,000 units of 150

2 in ffp3

months out & weeks

ing to delivery come forward

are bugs for next 6 months
of our masks for next 6

we have shipped 15m masks
10 per Mts shopper.
problem is getting it to point like -
social care, gps,

gowns

Diplomatic channel

→ < Europe-wide plea

Tests

first centres in Mölke, Keyes

Nett Shann & Channing

TR & pneumonia

02 / 1 (Kee)

800 tests by end of next week

Tanky

white
greenhouse

LA 5 with particular pressure

Home testing

400 tests by 5

3.5m antibody tests end of next week

legislation to get taken out at scale

16.5m of antibody tests → we are doing best
to work

10,000 to borrow? (No)

Swaps Lots of swaps

gate foundation has put a way to use different swaps

Reagents 67 problems in just different reagents
Risk

Why & means around The bank are printing money to finance
us. We have to negotiate a
dividend plan. £400 - £500 bn

By an act to clean a statement about more QE
by risk not to do more

Q2 GDP is below -20-30%.

unemployment up 3-4%

We cannot afford to do much more

has much time
Tedros $\frac{1}{2}$ m infected
20k dead

The full social economy full-out only
we will kill

What strategy & PPE

We are going to have to
global economy, my country
developing world
As well

We have to do
something
→ because we don't
have
→ because we can't
ideas

provision we will get this together

Epi 250m
developing world
will have
the disease

We have to
to stop the transmission
of the disease
we have to do

very dangerous
It will be hard
we need to come out
with

We must never
allow it to happen
again

We must identify these
countries

We must all be ready
we must have global
protocols for
testing, tracing

every single person who
has the disease

Let's bear in mind trying to get the world economy moving is the

press
there is no doubt about the
way
I have been asked to take
big down schools - stopping human
rights

bill's package
a double whammy
we need to look for
we need to know

It's not by accident that the
dilemma

It won't come back if
we retreat to a halfway

It's a sad story

The reason for the dilemma is so
important in our lives that it's
a little

but the way we go to fix it
is to clear down up

Frankly speaking this
to stop people meeting

as we speak we are
We are in a bit of a
dilemma

We can't afford to get into
this sort of a position

The reason

This is going to get worse
Other countries will suffer

Let us be absolutely frank
Colony and has not been a
people for nations

We have seen borders close
We have seen competition for
vital medicines - supplies
each country has been

obliged to take its own
dramatic steps to protect its
own population

It is the economic damage is
going to be colossal

The answer is not to
put up with these barriers remain
The answer is to work together

— learn lessons about our debt
— get the debt to be terminated
— decide to go back to work

— countries that have yet
to work on a plan to come
out

— this is a scalable hole
— It is a big

— It is
— It could have been worse
— No

budget of
revenue information - as of April
to be in places where it is impossible
supply our resources & re-establish

Your Majesty may thank for conveying his com-
~~mission~~ ~~I am delighted to see friends and~~
~~colleagues on this screen because so far this crisis~~
has NOT been a triumph for internationalism ~~and~~
~~multilateralism~~ — and in the country we have seen borders
closed between friendly nations, & we are seeing a severe qui-
pet competition for medical supplies; and instead of a
global response we have seen each country obliged to take its
own individual and dramatic steps to protect its own
population by trying to stop the invisible killer & in many countries
the most effective way to stop the virus is to stop people believing
in the way that as humans, stop us, ~~and~~ ~~and~~
interacts — ~~the economic damage is huge~~ & it is
not sustainable — & so the answer is not to
~~even deeper~~ to keep people apart, or our nations
apart. The answer is to work together as to beat this
by as far as possible (1) learn how it happens — what
can we do to stop it happening again (2) Work on
testing — testing — testing — developing globally shared understanding
the best test work (3) Work together on vaccine — UK
plans £2.8bn into CEPI — we are going to need that
for the countries that I think are going to see some
big numbers under. (4) & we need to get ready for
a post economic recovery — & we ~~we~~ won't do that
by putting barriers to trade, we in the UK are
absolutely capital that we are going to beat this this
& I look forward to working w. colleagues to ~~try to~~
beat it and the world & preparing a global economic
recovery.

Central content

total care of allocations

Roche

line

google
palmative
system

Oxygene van

ray, paper 1

last
recruitment
15h line & rods
ham 2 kee
appeared

fun
200
8 1/2 Motors

BML in Sweden

tylone sports plant

plus JCB Chetup

BSI comes to see us

Graham Heane Ed

We are only 24/7 to find solutions
Need to duplicate all the quantities -
supply chain stressed -
working together w. your help

One post Israel for difficult to replicate rapidly
microprocessors - about 60 units max production

Use our combatants to keep supply chains open
Use all our industrial might

Computables Israel

Andy Agnew's Sub Ventilator
We are all in on this
We have got to keep people alive
support the capacity in strong devices

a number of different products
We make this in abundance
by complicated machines

We have to be very clear on what we want
keeping up supply chain
get them supplied as quickly as possible

critical blockade & regulatory coordination
MHTA BSI

protections

99% in UK

Mark Githan UKRI
P1

& different
kinds

Chik pts 5h
FI team
My one Q

Ali - accents tests - we need PPE
& tests

How many new models

[23] — 7 products
— based on the model
— much simplified

2 or 3 sold outside the UK
2 front runners
Dry / Dry

See in yr 6th of materials

beater all specifications
just prototype is

GKN & consultant for aerodynamics

5-6 site design
assembly need

If we have to, we are looking
about full scale

60,000 extra for machines

Ranunculus - Plexus MHRA approval to
motivate the people - constant price barrier

because there are different types
you don't put someone in the same tax 48hrs

price cap

EU
XI

Medic

MHRA - making the sample

Chinese government v. DIT
Taiwan
Matters

3500
airports
MOD about how to

9th April

It takes 3-4 days to get the to
Hesteron

They have stock ties and ventilation

10 ventilators held up by Israel

10 per gun
100 per US, "
100 per gun 200 cum 30 Taiwan

Osborne

We could do w.
stuff per Act.
departments

EU's Lawson
10th - machine ventilation

Friday 27th

Risk - linear
urg of symptomatics

Indifference between days
a bit of smooths on desks data

R value - but it's not
what we're looking at 3 weeks ago

We don't have probes in London as of today
but we have to be ready as the numbers go

4 day doubling time in London
We need 840 on Monday

1477 — 1680

V beds

XL for Wed/Thur

13,500

If it goes doubling but ventilators

The evidence that SAGE reviewed

Good evidence that contact has been
reduced to a degree

Key workers - ^{Gore} making one test to workers and
present - public sector workers

presence of local authorities

Green death campaign
non-vulnerable vulnerable

Key public sector workers
WZ

Care testing 10,000 by Monday
5000 more per week

flukes - which have yet to be tested for
Rothie

1 on Swabs

may have a strain to the weapon problem

antibody test 15m
17.5m

Armed Forces - 200 a day

Kaletha - AIDS drug

hydroxychloroquine

We will have 15 agents to work

Newspaper Day

International / Antisocial Cars

15-16 days ~~was~~ we may not have large supplies

Patrick

we need to collect information
about the use of technology.

Jonathan Van Tass

might only work w/ a 5 day of

vacines

Modernus

CEO - need to reduce UK as clinical trials
MHRA will accept FDA approval w/ at
more payments

hyper - then relationship

vacines look for to bring for

hydroxychloroquine

reduces period of infection

older people less young people not taking it seriously enough
infection

business to business

Apple for charities
Corona beer

Ventilated beds -
no hanging tree

Saturday

Walled cultural canals
occasionally could protect
all different areas

Prison - black rats

120 prisoners operating at minimum level
of staff

abuse levels in key compounds

Prison / Boots

grey delirious state

Sunday

covid

Neurology

hair - plates, positions
in universities accommodation

98% capacity - we run it by big blocks

ROTL

gate Anti
person officers

Can we assist in justice -
a lot of outdoor people to help access govt

HMPPS

Need it but we will have the evidence

We are required to participate if we do not
corporate manslaughter

! How many

DH E guidance is not binding

1000 x11 - isolates

Symptoms outbreaks

→ do you stop to get by
lets, 10000 out

PH E

Examiner O'Moone

prevent symptoms outbreaks

single cell account as far as possible

as the number of outbreaks increases
reception - risk
reverse cohorts

high level of compartmentalization
little leakage
488 vulnerable people

They are not any less release cohorts

my 2 studies are in consideration for early release

major disorders

new people ~ - short sentence

No more new prisoners for the courts

Elvick picking up

17-18,000 prisoners come out every year

modeled in samples to all correct means still place 106 seats
around a poor compliance

50,000 deaths - 66% in the ICU

peak ICU 40,000

good compliance suggests peak ICU bed use
30,000

current compliance

when you allocate the constraints, you are circular

I feel 2 have a lot of ⁸⁰⁰⁰ up to 59,000 beds
8000 covid inpatients - 50,000 before we open our hospitals, also beds

no till in
culture or ventilation systems
its - Birmingham -
NUT in Manchester
World Trade Centre? Midlands is HOT
regional vs national

Ventilators: numbers to monitor. Also
British built:

Shipping - getting people back -
flying the shipping routes so we use
pieces of people & more flexible way
Ventilators / Quarantine / Infection doctor
new outbreak came model.
China Hubei were going to
stop the change of the medicine
50,000 already
80,000 people

PPE - stuff collecting the stuff which was
being given by the guidance. Also the
difference between who with = only works if
we

Swabs relaxation of w
2 UK manufacturers
alternative suppliers to UK. PCK
reagents. who w. can

Seeing global allocation for the UK
applied issues to work together - we don't have
much manufacturing capacity. Local manufacturing
Swabs - 4 is order. We don't collect swabs
until the construction. R & A extract reagents
Roche Therapeutics Qiagen

Swabs & PCR tests - which
one is better
false because it is a critical
national effort. We need to get better
to