Testimony Against Professor Ferguson of Imperial College

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Section II Our personal testimony

II.0 Our personal testimony in which we present material that we can personally attest to and consider material based on our own analysis or by reference to publicly available documents particularly government documents and data

Part C

C.0 In which we declare in a simple statement our claim against Professor Ferguson (PF) of Imperial College (IC)

1 Professor Ferguson invented figures bearing no relation to real-world data on Covid-19 available at the time and bearing no relation to the parameters set out in his Imperial College Covid-19 Response Team Report 9 (ICCRT R9) which massively exaggerated the Covid 19 threat to support a policy of lockdown which when duly implemented seven days later gave rise to substantial harm to the people of this country including loss of freedom, loss of livelihood, loss of life and harm to the economy.

2. Professor Ferguson ignored four simple projection scenarios which would have generated reasonable figures in line with world reported contagions in particular the primary contagions March to June based on UK cases, translation of Far East contagions in Hubei and South Korea, and a projection from his own declared parameters in ICCRT R9

2.1 [each outcome]

3. Professor Ferguson did not merely ignore but dismissed as 'temporary suppression' the most valuable insight into Covid-19 contagions being two completed contagions one Hubei China which was complete in cases and deaths and the second being South Korea which was complete in cases and required only the assignment of a Case Fatality Rate to generate a completed contagion estimate in deaths.

3.1 We regard as complete a contagion which has passed peak and has declined to a slight residual in cases or deaths as appropriate.

4. By ignoring practical estimates based on UK data, foreign data and even his own parameters Professor Ferguson generated a chart bound by no parameters so that it was an artefact of pure invention.

5. In his choice of 510,000 deaths Professor Ferguson exaggerated the estimates obtained by the three other practical methods by over 100 times in each instance.

6 Professor Ferguson in misrepresenting Covid 19 by massive exaggeration committed fraud which in causing harm to the people of this nation constitutes criminal fraud.

Part D Abbreviations

BMJ British Medical Journal

CGF Constant Growth Factor – A family of curves including exponential and normal curves

CW Chris Whitty

Figure 1a – Figure 1a in ICCRT R9 aka ICCRT R9 Figure 1a

GDF Growth Decline Factor – the rate of decline of growth expressed as a daily factor

IC Imperial College

ICCRT Imperial College Covid-19 Response Team

ICCRT R9 Imperial College Covid-19 Response Team Report 9

ICCRT R9 Figure 1a - Figure 1a in ICCRT R9

PV Patrick Vallance

R9 Report 9 (ICCRT R9)

SD Standard deviation

Part E Arithmetic of a contagion

E.0 In which we set out the simple arithmetic we use in tracking and analysing contagions

1. The arithmetic used to study and express contagions to the public includes arcane figures and terminology such as the R number which is not easily calculated and which does not define a simple arithmetic rate

1.1 These numbers are prepared and shared with the public by official spokesmen and translated into rates using phrases such as ‘doubling every five days’

1.2 These numbers are accompanied by references to ‘growing at the same rate’ or ‘exponential growth’ which is an entirely fraudulent claim for the growth of contagions

2. We use simple arithmetic easily reproduced by any individual with slight arithmetic skills and some familiarity with the Normal Distribution

2.1 Farr (1840) observed that contagions often followed a bell-shaped curve that of the Normal Distribution

2.1.1. We have observed the same for Covid-19, Covid-19 infographics, ICCRT R9 Figure 1a and all previous contagions for which we have found data or images

2.1.2 The normal distribution can be defined by its mean and standard deviation (SD)

2.1.3 A normal curve for contagions can be defined as a normal distribution centred on the peak date (mean) with a selected standard deviation and a scaling factor so that the area under the curve represents the population of cases, deaths or values as appropriate

2.1.3.1 Population here refers to 'total cases (or deaths etc)' not the country population

2.2 We observed that a normal curve has the property that its growth declines at a constant rate

2.2.1 The growth of a contagion is described as a daily growth factor which can be thought of as today's cases (deaths) over yesterday's cases (deaths)

2.2.1.1 The growth rate can be expressed as a percentage being the growth factor minus one

2.2.1.1.1 Thus 1.15 as a factor is a daily growth rate of 15%

2.2.2 The growth of a contagion can be calculated daily on actual data or on averages of data to give a smoother line

2.2.3 The growth of a contagion can be plotted to show the typical declining growth through any contagion

2.3 The growth of an exponential curve is constant and does not decline

2.3.1 As such the declining growth of actual contagions shows that exponential growth of a contagion is fraudulent even at the very beginning

2.3.2 Contagions never experience constant growth expect for the briefest of anomalous periods or by fraudulent reporting of data

2.4 A contagion may experience accelerating growth at the very beginning of a contagion

2.4.1 This is an artefact of arithmetic

2.4.2 Cases increasing from 0 to 1 is infinite growth

2.4.3 After the initial spike to a peak growth rate the growth settles into a standard decline

2.5 When mapped on log scales a constant rate of decline translates to a straight declining line

2.5.1 The rate of decline is constant as a factor

2.5.1.1 Thus at a factor of 0.9 a growth rate today of 2 declines to 2 x 0.9 = 1.8 tomorrow

2.5.2 The trend line of a plotted growth rate can be assigned to give an overall growth decline factor (GDF)

2.5.1.1 This GDF is the defining characteristic of normal curves and of the character of a particular normal curve

2.5.1.2 Growth rates are changing throughout the contagion but the GDF for a normal contagion is constant through the primary contagion

2.5.1.3 A typical Covid-19 contagion has a GDF of 0.985 or 0.986

2.5.1.3.1 A short sharp contagion such as South Korea might have a GDF of 0.97

2.5.1.3.2 A long and gently climbing contagion just as Japan might have a GDF over 0.99 with a correspondingly low growth rate

2.5.1.4 GDF is the single most important figure to describe and define a contagion and yet it is unrecognised in a ‘science’ that worships the fraudulent exponential contagion

2.6 A normal curve can be defined as a mean (peak date), standard deviation and scaling factor

2.6.1 Yet since normal curves have growth declining at a constant rate they can also be defined by a seed value (eg: 1 case), a seed growth rate expressed as a factor (eg: 2) and a growth decline factor (GDF, eg: 0.9)

2.6.1 For initial values of 1, 2 and 0.9 (the latter remaining constant)

2.6.1.1 the next day’s growth factor is 2 x 0.9 = 1.8

2.6.1.2 the next day’s value is 1 x 1.8 = 1.8

2.6.2 We refer to this as the CGF model for Constant Growth Factor which is both descriptive and a reminder of the three defining parameters: a starting value, a growth factor and a growth decline factor

2.6.3 The exponential curve can also be expressed as a CGF curve with an initial value, a growth factor and a GDF of 1

2.6.3.1 The growth rate of an exponential curve is constant so the GDF = 1

2.6.4 With normal curves occupying 0 < GDF < 1 and Exponential having GDF = 1 there is a third family of curves with GDF > 1 which we refer to as hypernential

2.6.4.1 These curves have the growth rate increasing which makes them more extreme even than exponential

2.6.4.2 Other than technically being the descriptor for the initial spike in growth they have no particular relevance to contagions

2.7 All contagions historically and including Covid-19 have a very reasonable fit to a normal curve

2.7.1 If there is a slight asymmetry such as is often observed that is readily noticed by using a reference normal curve

2.7.2 The reference normal curve allows us to notice curves which are slightly asymmetric and to distinguish them from curves which are aberrant and indicative of potential fraud or indeed certain fraud

2.7.3 A reference normal curve can be automatically created in formulae without code which is a boon in analysing eg: 200+ countries reporting Covid-19

2.7.3.1 The reference normal AKA autofit normal is constructed as follows

2.7.3.1.1 detect the peak value and date and set them as the mean for the curve

2.7.3.1.2 sum the total cases (deaths) pre-peak

2.7.3.1.3 calculate a nominal population (of cases, deaths) as 2 x pre-peak + peak value

2.7.3.1.4 assign a candidate standard deviation (eg: 10 days) which will inevitably be inaccurate

2.7.3.1.5 detect the peak value for the candidate curve

2.7.3.1.6 adjust the standard deviation as candidate SD x candidate peak value / actual peak value

2.7.3.2 This simple procedure is remarkably effective to allow the data to be plotted against a reference normal curve and so to give an indication of just how 'normal' a contagion is

2.7.3.3 By calculating the GDF of the autofit normal a hypothetical growth-decline line can be plotted and the actual growth of the contagion compared to that

2.7.3.4 The GDF of a normal curve relates to the standard deviation as GDF = exp(-1/(SD.SD))

2.7.3.4.1 The formula can be reversed to derive a standard deviation from the GDF as SD = sqrt(-1/ln(GDF))

2.7.3.4.2 Thus GDF is an intrinsic property of a normal curve and an alternative to standard deviation

2.7.3.4.3 Yet neither normal contagions or GDF are recognised in the Covid-19 regime

2.7.3.4.3.1 This is the biggest failure of science and victory for fraud in history

3 Understanding the above is critical to an effective analysis and modelling of contagions

3.1 The principles allow us to definitively prove multiple key observations

3.1.1 Regarding the 'exponential' virus

3.1.1.1That no contagion in history has been exponential

3.1.1.2 That no contagion is exponential even at the beginning

3.1.2 Regarding Lockdown

3.1.2.1 That lockdown didn't save a single case or life in the UK

3.1.2.2 That lockdown didn't save a single case or life in 52 lockdowns examined worldwide

3.1.3 Regarding Ferguson and a UK estimate for cases and deaths

3.1.3.1 That Ferguson could have derived a reasonable estimate for the UK from UK cases

3.1.3.2 That Ferguson could have derived a reasonable estimate for the UK from his own parameters

3.1.3.3 That both these estimates were at least 100x lower than his chosen 510,000 figure

3.1.3.4 That Figure 1a containing his figure contradicts his claimed parameters

3.1.3.4.1 That as such Figure 1a is independent of his parameters and is an invented figure

3.1.3.4.2 That by comparison to alternate estimates Figure 1a massively exaggerates Covid-19 risk

3.2 As such we re-iterate that understanding the principles of what is at heart a simple arithmetical approach is fundamental to debunking the lies and fraud put out by government and to proving those frauds without doubt or argument

Part F – The Principles and Practice of Reasonable Analysis and the Scientific Method

F.0 In which we set out our case against PF as outlined in our case infographic.

1. PF had the opportunity to model an outcome based on clearly defined Covid-19 data or alternatively from clearly defined parameters derived from Covid-19 data using a reasonable and appropriate technique

1.0.1 Had he used such a method and declared it in ICCRT R9 then a 3rd party could replicate the analysis and get a similar or identical figure or outcome.

1.0.1.1 This replication of results is in essence what BMJ is claiming to have done in affirming the correctness of PF and ICCRT R9 in particular ICCRT R9 Figure 1a including the 510,000 UK deaths figure

1.1 We can describe the overarching principle of analysis as input + method = output

1.1.1 A 3rd party can then examine the input, the method and the output

1.1.2 If the input is challenged and considered inappropriate then the output is challenged and considered inappropriate

1.1.3 If the method is challenged and considered inappropriate then the output is challenged and considered inappropriate

1.1.4 If the input and method are replicated and the new output does not match or reflect the original output then the original output did not in fact reflect the input + method

1.1.4.1 Simply put the output was invented or fraudulent

1.1.5 If the output does not reflect real-world experience then the input or method do not represent real world experience

1.1.6 An outcome where input, method and output are reasonable with reference to real-world experience may be deemed a reasonable effort to model the real world

1.1.6.1 The determination of reasonable will depend on a judgement call based on the required accuracy and demonstrated accuracy

1.1.6.2 In attempting to validate the Theory of Relativity for example it was necessary to have timing accurate to an absurd degree which could only be provided by atomic clocks.

1.1.6.3 In attempting to predict the outcome of the Covid-19 contagions we would have been comfortable with far lower levels of accuracy which were nevertheless reasonable and practical

1.1.6.3.1 We would suggest that to get within ten times the actual figure or one tenth of the actual figure would be a poor estimate but not grounds for prosecution

1.1.6.3.1 It would be grounds for downgrading the reputation of the proponent and the validity of the input + method however

1.1.6.3.2 To get within half or double the final outcome in Covid-19 we would consider a very reasonable estimate

1.2 There are rarely if ever contexts where only a single input + method pair is available

1.2.1 Where multiple input + method pairs are available a sensible approach would be to try each input + method pair and compare outcomes

1.2.2.1 Outcomes or output can be compared to other estimates and to real-world experience

1.2.2.2 Outcomes which are consistent with each other but inconsistent with the real-world are of no real-world value

1.3 Thus for a matter of importance in the real-world the most important test is whether the outcome of an input + method pair reflects the real-world experience

1.3.1 This may only be available after the real-world outcome or real-world outcomes have materialised some time after the original exercise

1.3.2 However if real-world data is available and the experimental outcome does not reflect the real-world data then the experimental outcome has no validity

1.3.3 To dismiss the real-world outcome and insist that an experimental outcome is true real or accurate without reference to a real-world outcome is absurd

1.3.3.1 An individual is free to hold any belief

1.3.3.2 An individual representing an outcome as real and accurate without reference to the real-world or in defiance of the real-world is either delusional or fraudulent

1.4 Where multiple input + method pairs are available to model an outcome they should be expected to return similar outcomes for similar real-world contexts

1.4.1 The ultimate test of each input + method pair is how well it mirrors the real-world context it is modelling

1.4.2 Between two input + method pairs it is reasonable to suggest that the input + method pair which more closely resembles the real-world context in input, method and output is the better model

1.4.3 To dismiss ignore or refuse to apply readily available alternate input + method pairs which generate very different outputs from the chosen input + method pair would disguise or hide the unreliable nature of the modelling processes and the unreliability of their output

1.5 We hold the above to be a reasonable exposition of what might be called the scientific method in regard to modelling a scenario

Part G – Principles of Input + Method = Output in the Context of Ferguson

1. We prepared an infographic which sets out our case against Ferguson in a clearly defined structure

1.1 This part works through that same structure

2. PF sets out in ICCRT R9 his input + method giving rise to the output ICCRT R9 Figure 1a

2.1 Neither the input nor method are precisely defined which is poor science at best

2.1.1 Given the critical nature of the output which will be shared worldwide and change policy in the US and put the UK into lockdown we would have expected a rather more diligent approach especially given the extreme nature of the 510,000 deaths figure published

2.2 The input is specified closely enough that a reasonable estimate of the input can be chosen

2.3 The method is declared as a private model whose code will eventually be published and criticised

2.3.1 The BMJ will publish a paper in support of PF in which they essentially state that by using the same input and same method they got the same output

2.3.1.1 We would regard this as remarkable in its inanity

2.3.1.2 If the BMJ researchers used the same input and same method and didn't get the same output that would be news

2.3.1.3 To claim that that they got the same output in no way validates the output

2.3.1.4 It merely says that the input + method were consistent

2.3.1.5 Whether the input + method were consistently right or consistently wrong or inappropriate remains to be shown

2.3.1.6 We show them to be egregiously inappropriate

2.3.2 In publishing this paper BMJ join the ranks of questionable organisations losing their integrity over Covid-19

2.3.2.1 To claim that using the same input and same method and getting the same output shows that the original output was accurate is at best absurd and at worst fraudulent

2.3.2.2 This claim by the BMJ joins a long list of questionable or outright fraudulent misrepresentations by supposedly authoritative and respected institutions

2.3.2.3 That list includes notably Johns Hopkins which might loosely be called the institution most closely corresponding to Imperial College in the UK

2.4 Where a method is poorly defined or questionable or otherwise inaccessible an alternate method which generates the same or nearly identical output can be substituted

2.4.1 This is recognised variously as reverse-engineering, cloning or a black box approach

2.4.2 This was most effectively used by Compaq who replicated not the proprietary IBM PC microchip but the input-output mapping for the IBM microchip

2.4.2.1 A device using this microchip would not be able to tell the difference between the presence of an IBM microchip vs a Compaq microchip

2.4.2.2 Thus Compaq were able to release Compaq personal computers which would run IBM PC software and were able to offer these at a lower cost than the IBM PC

2.4.2.3 Thus the PC clone market was born which subsequently just became the PC market and IBM left the market when it could no longer compete

2.4.2.4 Thus 'cloning' or mirroring the input-output map is a proven technique in technology and science

2.5 This can be taken a step further to focus solely on the output

2.5.1 This might be expressed simply as “if it looks like a duck, swims like a duck and quacks like a duck it’s a duck”

2.5.2 The significance of this is that ICCRT R9 Figure 1a is the claimed or implied output of the PF modelling process set out in ICCRT R9 being the input + method specified in that document

2.5.3 If the output clone has input parameters or output characteristics that can be reframed into the same context as the declared input parameters then the claimed input parameters and the actual output-derived input parameters can be compared

2.5.3 If the output clone has characteristics or input parameters which contradict the claimed input parameters then the claimed input parameters were not in fact used to generate either the clone or the published ICCRT R9 Figure 1a

2.5.4 If the output clone and hence the ICCRT R9 Figure 1a contradict the claimed input parameters then the output clone and hence ICCRT R9 Figure 1a were not based on the claimed input parameters

2.5.5 If the output clone and hence the ICCRT R9 Figure 1a were not in fact based on the claimed input parameters then the output claim and hence ICCRT R9 Figure 1a are independent creations which we can legitimately describe as inventions unconnected with the claimed input

2.5.6 As inventions the output clone and hence the ICCRT R9 Figure 1a represent not the outcome of scientific or mathematical analysis but a choice by the author PF as to what to represent in Figure 1a

2.5.7 In making a choice other than a necessary replicable output based on the claimed input + method PF breaks with legitimate scientific method and misrepresents a personal choice as a necessary scientific output under the further authoritative imprimatur of Imperial College

2.5.8 Simply put PF presents a Figure 1a of his own choosing as scientific and backed by Imperial College

2.5.9 That PF chooses to present a Figure 1a exaggerating the projections from other reasonable methods including real-world completed contagions by over 100 times is a conscious choice on the part of PF

2.5.10 That PF chooses to present a Figure 1a exaggerating the projections from other reasonable methods including real-world completed contagions supported the UK government in implementing a lockdown without material dissent which was entirely predictably massively harmful to the lives, livelihoods, freedom and economy of this nation including 15,000 lives lost as non-covid excess deaths during the primary contagion March to June

2.5.11 That PF chose to pass off as science a Figure 1a not connected to the real-world contagions or even his own parameters but one exaggerating the real-world experience and reasonable legitimate estimates gave rise to material harm to the people of this nation.

2.5.12 To misrepresent the facts resulting in harm is criminal fraud.

2.5.13 PF is thereby guilty of criminal fraud.

3 The input + method = output principle has a further powerful feature

3.1 If two input + method = output trinities generate identical output then the input + method of one is identical to the input + method of the second

3.1.1 This is firstly a tautology since (input + method) = output it is equivalent to saying output 1 = output 2 where we first declared that output 1 = output 2 so of course that must hold

3.1.2 However what it does not mean is that input 1 = input 2 or that method 1 = method 2

3.1.2.1 Examples include colour mapping and temperature

3.1.2.2 RGB and CMY use different inputs (Red, Green, Blue vs Cyan, Magenta, Yellow) and different methods (show Red, Green, Blue vs show Cyan, Magenta, Yellow) yet the outcome is that any colour representable in RGB is representable in CMY and vice versa

3.1.2.3 Heating water on a stove to 80 degrees Fahrenheit and heating water in a microwave to 26.6 recurring Celsius achieve the same result: water heated to the same temperature yet the input temperatures are different values and the methods are different being the stove or microwave.

3.1.2.4 In the case of temperature there exists a well-known mapping translating a Fahrenheit parameter to Celsius parameter and vice versa

3.1.3 The power of this is to recognise that for two input + method pairs we are indifferent to the choice of input + method if the output is identical.

3.1.3.1 We can refer to the two input + method pairs as being equivalent

3.1.3.2 We encounter this in our analysis with the unexpected but invaluable recognition that a Normal curve can be represented as a CGF (Constant Growth Factor) curve

3.1.3.2.1 A Normal Curve can be defined by a Mean, Standard Deviation and Scaling Factor

3.1.3.2.1.1 We use normal curves as reference curves to Covid-19 and other contagions to good effect

3.1.3.2.1.2 A normal curve has as a convenient characteristic that the growth factor of the curve being the ratio of the next value over the previous value is a constant

3.1.3.2.1.3 Being a constant we can define a normal curve as a seed value, a seed growth factor and a seed growth-decline factor where the growth-decline factor will be greater than zero and less than 1

3.1.3.2.1.3 We refer to such a curve as a CGF curve as it is defined by a Constant, a Growth value and growth-decline Factor

3.1.3.2.1.4 CGF curves turn out to be an invaluable concept

3.1.3.2.1.4.1 Since the exponential curve is constant growth we can redefined an exponential curve as being a special case of a CGF curve where the growth-decline factor is 1

3.1.3.2.1.4.2 This highlights the close relationship between the mythical exponential virus and the actual normal virus

3.2 The relevance of CGF curves is that they are identically Normal Curves and so represent not a different family of curves but the same curves defined (input) and implemented (method) differently to the usual Normal Distribution input (mean, standard deviation, scaling factor) and method (the Normal Distribution function adapted by multiplying by a scaling factor)

3.2.1 Thus two very different input + method pairs give us access to identical curves and output

3.2.2 The two input + method pairs can also be shown to have definitive translations between key parameters

3.2.2.1 The Growth-Decline Factor for a GDF curve can be derived from the Standard Deviation of the Normal curve as = exp(-1/(SD.SD)) for a standard deviation quoted in the same dimension as the X interval to be plotted (eg: days, daily)

3.2.2.2 That function is reversible so that the Standard Deviation of the corresponding Normal Curve can be derived from the Growth Decline Factor of the CGF curve as SD = sqrt(-1/ln(GDF))

3.3 Thus we establish that for identical output then a second (input + method) is identical in effect and equivalent to a first (input + method)

3.4 This has several important consequences

3.4.1 For the same input-output we have the clone scenario

3.4.1.1 The second method is identical in effect to the first

3.4.2 For different inputs giving rise to the same output we have the alternate scenario

3.4.2.1 The second input + method is an alternate to the first input + method

3.4.2.2 As with CGF curves vs the Normal curve or RGB CMY we have different methods requiring different inputs achieving the same output

3.4.2.3 The input parameters between the two models are likely and possibly necessarily definitively related as with temperature conversion or Standard Deviation to Growth Decline Factor conversion

3.4.3 The same input having different output indicates that the methods are not equivalent

3.4.3.1 This is trivially illustrated as the square (method) of 2 is not the same as the cube (method) of 2 as they give rise to outputs of 4 and 8 respectively

4.0 We now arrive at a critical observation

4.1 Identical outputs must have identical characteristics

4.2 Thus if the Normal Curve and corresponding CGF curve produce an identical curve then whether the Normal Curve input + method is used or whether the CGF input + method is used is irrelevant

4.3 The output being identical any derivative characteristics must be identical

4.3.1 Thus for a curve since the outputs are identical the gradient must be identical at a given point

4.3.2 More generally any function using the output must return identical values

4.3.3 Thus for example the ratio of two points must be identical since the underlying points are identical

4.3.3.1 Thus the growth factor at any given time for the original and clone must be identical

4.3.4 Trivially if the outputs are identical then the datapoints must be identical

4.3.4.1 Thus if the clone has a value Y at point X then the original has a value Y at point X

4.3.4.2 We use this where determining the value Y is difficult or impossible as when reading small values from ICCRT R9 Figure 1a for example

5.0 Near but not identical output

5.1 Realistically it may not be possible to reflect a perfect match between an arbitrary original output and a candidate alternate input + method with its associated output

5.2 This is perfectly acceptable provided that the alternate is sufficiently accurate to be effective

5.3 The measure of that effectiveness will depend on the context and the judgement of the observer

5.4 Where a clone is not perfectly accurate a magnitude of error can be factored in

5.5 If an output from a claimed input + method massively contradicts the claim by an order which overwhelms any possible error then the output claim is fraudulent

6.0 Fraud as Fact Not Opinion

6.1 We have covered the principles of modelling and the observations with regard to input + method = output extensively because we wish to remove the issue of doubt or opinion or casual action or inadvertent error

6.2 If we operate in a world where 8 x 8 = 64 then PF is entirely entitled to operate in a world where 8 x 8 = 6400

6.2.1 What PF is not entitled to do given that the rest of the world operates by 8 x 8 = 64 is to present a scenario as scientific and factual that relies on 8 x 8 = 6400 without declaring that he operates in that bizarre and unrepresentative world

6.2.2 Far from declaring his ICCRT R9 Figure 1a to be based on an unrealistic personal philosophy it was presented as scientific fact backed by the imprimatur of Imperial College

6.2.3 As a private individual PF might have been known as a flat-earther, as delusional, as a person with a known history of fraud and yet with the imprimatur of Imperial College ICCRT R9 would still have carried weight

6.2.3 As a member of SAGE advising the government on this critical matter PF was certified not as delusional but as authoritative and trustworthy so that PF was backed by the imprimatur of SAGE, Imperial College and the British Government

6.2.4 As such ICCRT R9 and its Figure 1a carried the highest possible weight sufficient to change the course of US policy as recounted in the media and to carry the weight sufficient that lockdown was imposed without any material dissent from parliament or the people of this nation with the gravest consequences arising from it

6.2.5 That ICCRT R9 was disclosed and Figure 1a duly regarded as authoritative despite PF failing to disclose that he was operating in a world where 8 x 8 = 6400 and without anyone in the government or SAGE or industry or academia noticing that he was proposing that 8 x 8 = 6400 is not merely a failing on his part or the part of others but a matter of a deliberate choice of an absurdity which PF is

more than capable of recognising as an absurdity and which by their failure to do due diligence and highlight this absurdity has discredited the government, industry including the mainstream media and academia.

6.2.6 That the precise statement of the absurd was not 8 x 8 = 6400 is not material.

6.2.7 ICCRT R9 Figure 1a contains precisely such an absurdity which is an arithmetic absolute

6.2.7.1 There is no debate

6.2.7.2 There is no ambiguity

6.2.7.3 The output does not in the slightest reflect the declared input

6.2.7.4 As such Figure 1a is a matter of invention not connected to the claimed input parameters.

6.2.7.5 As such Figure 1a does not represent science but invention imagination or a personal choice to suit a personal agenda

6.2.7.6 In making a personal choice to misrepresent a projection of Covid-19 deaths and pass it off as scientific fact PF committed fraud.

6.2.7.7 In choosing a figure over 100 times larger than other reasonable projections including that of his own declared parameters PF supported and greatly insisted in the effortless imposition of lockdown without material dissent

6.2.7.8 In greatly facilitating the imposition of lockdown with its predictable and inevitable harm PF committed fraud leading to harm

6.2.7.8 In greatly facilitating the imposition of lockdown with its predictable and inevitable harm PF committed criminal fraud

7 Relevance of the Argument

7.1 The purpose of this part of our testimony has been to set out the underlying principles by which we assess ICCRT R9 Figure 1a

7.2 In particular it sets out the significance of a contradiction that might otherwise be misunderstood by members of a lay audience or non-mathematical jury

7.3 In mathematics it is a standard procedure to negate a claim by assuming it to be true and showing that it gives rise to a contradiction.

7.3.1 This is Proof by Contradiction

7.3.2 A common use is that if we wish to show that a proposition is true we can assume it to be false and then negate that claim.

7.3.2.1 Since the claim that the proposition is false is shown to be false by contradiction the proposition is true.

7.4 Once a proposition is negated it is not a matter of opinion or belief or unfortunate or better safe than sorry.

7.4.1 A proposition negated has no standing

7.4.2 A proposition negated is false

7.4.3 Representing a false proposition to be true is misrepresentation and fraudulent

7.4.4 Representing a false proposition to be true which misrepresentation gives rise to harm is criminal fraud

7.5 When we show that ICCRT R9 Figure 1a contradicted his claimed parameters it is not merely an error

7.5.1 That contradiction unpins ICCRT R9 Figure 1a from the realm of fact and science and PF's own parameters

7.5.2 ICCRT R9 Figure 1a is removed from science and enters the realm of imagination invention or marketing

7.5.3 If there is any doubt as to what it might be marketing we need only refer to the government's declared agenda: massive threat, lockdown, wait for the vaccine.

7.5.4 ICCRT R9 Figure 1a is the result of criminal fraud and it is not difficult to find a motive when the government has made entirely clear what it is determined to sell to the public

7.5.6 The only issue in the wider context is why the government would be so determined to betray the people of Britain in favour of pushing an experimental pharmaceutical product

7.5.7 The traditional answer of course is money

7.5.7.1 We leave that to other investigators to prove that connection

8. With the principles outlined that remove ambiguity and emotion from the matter of determining and understanding the significance of the contradiction we will outline we move to the actual data and evidence for the multiple input + method = output scenarios that PF could have considered but ignored and for the one input + method = output scenario he chose to present as fact yet which is contradicted by his own claimed parameters.

Part H - Scenarios Available Dismissed and Promoted

E.0 In which we look at the scenarios that PF could have considered and at the scenario he did consider and promoted

1. The claim of ICCRT R9 Figure 1a is that it represents an expected outcome for UK and US deaths in an unmitigated scenario for Covid-19

1.0 The key figure annotated in Figure 1a is the figure for 510,000 UK deaths

1.0.1 The key curve in Figure 1a is the curve for projected UK deaths

1.0.2 Figure 1a presents the output for an unmitigated no-intervention outcome

1.0.2 In ICCRT R9 test PF references 81% infected for an unmitigated no-intervention outcome

1.1 We highlight several points already arising

1.1.1 Unmitigated means no intervention, no social distancing and in particular no lockdown

1.1.2 Figure 1a represents an expected outcome of 81% infected and 510,000 UK deaths which is an escalation from Chris Whitty (CW) who on March 3rd represented the threat from Covid-19 to be 80% infected and 1% deaths which was translated by the media to be 530,000 UK deaths which incidentally implies a UK population of 66.25 million.

1.1.2.1 Although 510,000 UK deaths is indeed lower than 530,000 UK deaths we do not consider that a reduction of 3.7% constitutes a material reduction from 'worst case' to 'reasonable'

1.1.2.2 We consider instead that to translate a 'worst case' into an 'expected' scenario represents an escalation of threat

1.1.2.3 Neither 530,000 UK deaths nor 510,000 UK deaths stands in the light of the scenarios we will outline so that CW is a further person of interest in the commission of fraud to promote the Covid-19 threat

1.1.3 Although PF had as his two client markets the UK and US we address only analysis for the UK as PF is a British citizen advising the UK government whose lockdown harmed Britain of which I am a resident and citizen

1.1.4 Although the report contains 20 pages the mainstream media did not promote in-depth analysis of the full 20 page report

1.1.4.1 The sole number of interest to the British people and as already demonstrated by the mainstream media following the March 3rd briefing was how many people were going to die.

1.1.4.2 That figure is annotated on ICCRT R9 Figure 1a so that this chart is all the media needed to advertise the threat to the people of the UK and it is all that PF needed to create to advertise that threat

1.1.4.3 As such ICCRT R9 ex Figure 1a may be regarded as the fluff or packaging for this one key chart which would advertise the only number the British people were interested in which was how many people were going to die.

1.1.4.4 As such the merit or lack thereof of the report ex Figure 1a is of no interest or relevance excepting its relevance in providing parameters for Figure 1a and highlighting the attitude or position of PF in regard to his chosen scenario and to alternate scenarios.

2. Tasked with providing an estimate of UK deaths from Covid-19 a reasonable person would assume that PF must use available data on contagions and in particular on Covid-19

2.1 Given that it was labelled 'novel' coronavirus the marketing was already in place to imply that no prior contagion could possibly inform us about this 'novel' threat

2.1.1 We might dispute that.

2.1.1.1 Indeed the observations going back to Farr in 1840 that contagions followed a bell-shaped curve aka a Normal curve were borne out by our own observations in March/April that Covid-19 too was indeed following a normal curve

2.1.1.1.2 Further analysis has shown that other contagions including Ebola, Sars, Seasonal Flu, 1918 Influenza all follow humped curves that are close to normal or near perfectly normal

2.1.1.1.2.1 They follow these curves regardless of whether interventions were attempted and in particular with no interventions or with limited interventions such as the modestly effective flu vaccines against seasonal flu

2.1.1.2 In choosing the shape of ICCRT R9 Figure 1a curves PF himself illustrates his recognition and support of the normal curve for contagions since we will show that his Figure 1a is an excellent fit to a normal curve and is near perfectly replicated by a pair of normal curves with slightly different standard deviations pre and post-peak

2.1.1.3 In choosing their infographics for 'flattening the curve' governments and organisations have themselves opted for humped curves which are explicitly not exponential curves

2.1.2 Thus far from being 'novel' Covid-19 has been understood in the media and by science and by government to be 'normal' or humped with a near-Normal curve

2.1.2.1 Yet the same government, media and science persist in exploiting the fear factor generated by characterising the contagion as 'exponential' despite the trivial observation that it is not and nor has any contagion ever been

2.1.2.1.1 As such when the Covid-19 contagion turns out not to rise to infinity but curls over into a humped curve like any other contagion this is hailed as the 'success' of lockdown

2.1.2.1.1.1 Nothing could be further from the truth as we definitively show that the UK lockdown in common with 51 other lockdowns internationally did not alter the trajectory of the contagion in the slightest

2.2 PF will have several alternate scenarios available any of which would have generated figures over 100 times lower than his finally chosen 510,000 UK deaths

2.2.1 PF will either ignore them or dismiss them including his own claimed parameters so that ICCRT R9 Figure 1a is left without any foundation or connection either to the real-world of Covid-19 or to his own parameters characterising Covid-19 and his professed modelling exercise.

2.2.1 PF has a simple and exclusive set of scenarios that he can choose from

2.2.1.1 PF can choose to derive a projection from actual Covid-19 data directly

2.2.1.1.1 This must arise from either UK reports or non-UK reports

2.2.1.1.2 ICCRT R9 states that the projection was modelled to March 14th data

2.2.1.1.3 By March 14th 146 countries were reporting cases to WHO as published in WHO Daily Situation Reports

2.2.1.1.3.1 Of these 15 had over 20 non-zero datapoints including the UK, US and Italy representing the two client nations UK and USA for ICCRT R9 estimates and a country Italy referenced by PF in the report

2.2.1.1.3.2 Of these 15 there were four countries with over 30 datapoints which included two countries with completed contagions being China and in particular its province Hubei home to Wuhan which was complete in cases and deaths and Republic of Korea (South Korea) which was complete in cases

2.2.1.1.3.2.1 A contagion is complete in our view when it has shown a typical Normal curve and has passed peak and declined to the point that there are only residual minor cases or deaths reported by comparison to the peak value.

2.2.1.1.3.2.1.1 A contagion being ‘complete’ in that sense does not preclude further outbreaks

2.2.1.1.3.2.1.2 A single complete contagion may itself include multiple completed sub-contagions or outbreaks

2.2.1.2 Alternatively if PF chooses not to extrapolate from national (UK or foreign) data directly then PF must choose some characteristics of Covid-19 and its contagions to propose an estimate

2.2.1.2.1 This is the approach PF elects to claim as the basis for ICCRT R9 Figure 1a

2.2.1.2.1.1 A method is declared though it is not specified in ICCRT R9 and is subsequently criticised

2.2.1.2.1.2 Parameters (input) are declared though not with precision but close enough that we can accept them for the purpose of contradiction

2.2.1.2.1.3 ICCRT R9 Figure 1a is inserted supposedly reflecting the output of the input + method

2.2.2 Thus already PF has disregarded the direct extrapolation from existing data which would be trivial in the case of completed contagions in the Far East and straightforward in the case of UK data though with only 21 non-zero datapoints for cases there was no guarantee that such would be the case.

2.2.2.1 Of these the completed contagions in the Far East being Hubei (cases and deaths) and South Korea (cases) are invaluable

2.2.2.1.1 There is a reason that cooking shows once used the oft-repeated term “here’s one we prepared earlier”

2.2.2.1.2 A jigsaw without an image for its frame of reference or without coloured pieces at all is immeasurably harder

2.2.2.1.3 A kit or flat-packed item without an image and instructions is a nightmare

2.2.2.2 Thus in seeking to answer the question “how many people will die from Covid-19 in Britain” the availability of “here’s how many people died in Hubei China” is invaluable

2.2.2.2.1 Likewise the completed contagion in cases in South Korea requires only a Case Fatality Ratio to project to a completed contagion in the UK

2.2.2.2.2 Hubei China and South Korea were the ultimate ARTF contagions requiring only a scaling from the Hubei and Korea populations to immediately give UK figures for expected deaths

2.2.2.2.3 Yet these were not merely ignored but dismissed as ‘temporary suppression’.

2.2.2.2.4 Thus PF was claiming that the completed contagions were not in the least complete but would flare up the moment restrictions were lifted and generate entirely unknown and unspecified contagions

2.2.2.2.4.1 Unsurprisingly these contagions which looked perfectly normal stayed just as dead as one might expect

2.2.2.2.4.2 We do not say that the 2017-18 flu is still with us in 2020

2.2.2.2.4.2.1 We say that 2017-18 flu is over. The contagion is done.

2.2.2.2.4.2.2 Instead we have 2020-21 flu or would have had it not been eradicated.

2.2.2.2.5 In dismissing these invaluable indeed most valuable of all data as 'temporary suppression' PF gave himself permission to ignore the only real-world examples of a completed Covid-19 land contagion

2.2.2.2.5.1 It is not unreasonable to ask why PF would do that nor difficult to see how it fits into a narrative that will end up with his choosing an entirely fictitious and invented figure pursuant to whatever agenda or motive he had for doing so.

2.2.2.2.5.2 The rational approach would be to use the figures and adjust for lockdown effectiveness

2.2.2.2.5.2.1 PF references such a study in ICCRT R9

2.2.2.2.5.2.2 Yet PF omits to do the obvious calculation of adjusting the Hubei figures for the UK

2.2.2.2.5.2.3 Instead PF will publish a figure unconnected with any Covid-19 data and exaggerating the threat over 100 times versus other estimates and comfortably over 1000 times over experience to this day in countries in the Far East and Africa

2.3 Moving to the explicit scenarios we consider what was possible with each

2.3.1 Using Far East data for Hubei China and South Korea PF need only scale the achieved results for the completed contagions to the UK population

2.3.1.1 For Hubei which was complete in cases and deaths the scaling is a simple 3085 x 66.25 / 59.17 = 3454 deaths using 66.25 for the UK population

2.3.1.1.1 If PF wished to factor in a 'lockdown benefit' he could have deemed lockdown to be 90% effective and published an estimate of 34,540 deaths for the UK

2.3.1.1.2 This would have been a not unreasonable estimate versus the 40,341 deaths experienced March to June in the UK primary contagion

2.3.1.1.3 Since we have shown lockdown to have had zero effect in the UK on cases or deaths his estimate would have been reasonable for the wrong reasons and we would have to seek other explanations for why the UK was so badly hit vs Hubei

2.3.1.2 For South Korea which was complete in cases PF could have scaled cases as 8090 x 66.25/51.2 = 10,468 cases

2.3.1.2.1 PF could then have applied a Case Fatality Ratio such as 4.55% for Hubei to arrive at 476 deaths in the UK

2.3.1.2.2 South Korea did not lockdown

2.3.1.2.3 PF could have declared track and trace to be 99% effective and published a figure of 47,600 for UK deaths

2.3.1.2.3.1 This would be not unreasonable vs the actual 40,341 deaths March to June

2.3.1.2.3.2 If Track and Trace were that effective it is astonishing that the government did not immediately implement it

2.3.1.2.3.2.1 Their failure to do so shows that either they didn't believe it which would have rendered PF's figure to be fraudulent

2.3.1.2.3.2.2 Or it would show that the UK government had no intention of curtailing deaths which would align with their marketing agenda for the vaccine

2.3.1.2.3.2.3 This also aligns with their sending sick people into care homes to further promote the contagion and its associated deaths

2.3.1.2.3.3 Like lockdown Track and Trace has proven massively ineffective in preventing or containing a second wave

2.3.1.2.3.4 Thus UK Track and Trace and UK Lockdown do not explain the size of UK deaths relative to the Far East and Africa

2.3.1.3 Nevertheless PF could have published these figures either adjusted for Lockdown and Track and Trace or unadjusted for intervention

2.3.1.3.1 The unadjusted figures for Hubei and South Korea would have been 147 and 1070 times lower than PF's choice of 510,000 UK deaths

2.3.1.3.2 The adjusted figures for Hubei and South Korea increasing the estimate by 10 and 100 times respectively would still have left them 14.7 and 10.7 times lower than the 510,000 UK deaths that PF chose to publish

2.3.2 PF dismissed the China and Korea contagions as 'temporary suppression' and chose instead to focus on UK data despite it being incomplete and of only slight possible utility versus already completed contagions

2.3.2.1 In focusing on the UK PF could have chosen to focus on UK cases or UK deaths

2.3.2.1.1 UK cases had 21 non-zero datapoints by March 14th while UK deaths had 7

2.3.2.1.1.1 We have elsewhere cited this as 8 datapoints but we believe 7 non-zero datapoints to be the more accurate figure by comparison between WHO data and media reports on March 15th

2.3.2.1.1.2 Either figure is an absurdly low figure to form the basis of an extrapolated curve

2.3.2.1.2 To attempt to extrapolate on the basis of 21 datapoints would be extremely high risk

2.3.2.1.3 To attempt to extrapolate on the basis of 7 datapoints would be absurd

2.3.2.1.4 PF chose to fit his model to the 7 datapoints

2.3.2.2 If a UK extrapolation from cases was to be attempted the datapoints must first present a curve and not a straight line must indeed be a curve

2.3.2.2.1 Strictly this is a curve on log scales so that the distinction between exponential and non-exponential or quasi-normal or normal is clear

2.3.2.2.1 If the curve was in fact a straight-line exponential on log scales it would be a boon to those promoting the exponential but of no use to someone extrapolating for a deaths total

2.3.2.2.2 If the curve was variable and near random such as with early sporadic data and minor outbreaks or reports the data would be essentially useless

2.3.2.2.3 If the curve was smooth and variable such that its progress could not be easily extrapolated it would be high risk and essentially useless

2.3.2.2.4 Thus there was only a slight chance that the curve could prove useful and to prefer this method to the simple arithmetic if scaling the Far East would be absurd as a primary estimate

2.3.2.2.5 Despite all this it turned out that the UK cases provided just enough information to allow a very reasonable estimate of the projected outcome of the primary contagion

2.3.2.2.6 Applying a Case Fatality Rate of choice the projected curve would give not only an estimate of total cases but also of total deaths

2.3.2.2.7 We outline this scenario in detail later

2.3.2.3 The other UK data readily available was deaths

2.3.2.3.1 This comprised precisely 7 non zero data points to March 14th across 9 days

2.3.2.3.2 Of these data points the 6 points and 8 days reflected a minor outbreak rising from 1 death to 4 deaths then back to 1 death

2.3.2.3.3 The total to March 13th was 10 deaths. The total to March 14th was 35 deaths as reported in the media slightly higher than the lagged WHO figure of 29 deaths.

2.3.2.3.3.1 Had PF been pushed to publish one day earlier and sought data to March 13th his estimate would have reflected reference deaths one third the day following.

2.3.2.3.3.2 With the datapoints comprising a micro-outbreak that was over and one spike of deaths on the 14th March reported to bring the total to 35 deaths there was no reasonable manner in which one could extrapolate those figures to determine the future of the UK, US and other nations who would put their trust in the integrity of Imperial college

2.3.2.3.3.3 We did not attempt or propose such an extrapolation

2.3.2.3.3.4 The datapoints were reported in WHO apparently one day late as 1, 1, 0, 1, 4, 0, 2, 1,19

2.3.2.3.3.4 Metro reported 35 deaths by the 15th presumably 14th data so that we consider that figure to have been accurate at the time of PF conducting this exercise and we treat the last figure as 25 not 19.

2.3.2.3.3.4.1 Since we do not use the series the issue is not material

2.3.2.3.3.4.2 Since PF defined his second parameter as fitting to the 'cumulative deaths to March 14th' we use 35 deaths for that figure though again it will turn out not to be material

2.3.2.3.3.5 PF was therefore choosing to fit his model to the least useful and reliable data of all being base on 7 non-zero datapoints when cases had 21 datapoints and Hubei and South Korea were complete in cases and deaths and in cases respectively

2.3.3 At this point PF has dismissed the prime source of useful data being the completed contagions of Hubei China and South Korea

2.3.3.1 The other completed contagion is that of the Diamond Princess which does have some utility such as setting an upper bound for infection at 20% but this is already far higher than Hubei (0.11% of population were cases) so as a ship-based infection we tend not to pay attention to it.

2.3.3.2 Hubei and South Korea remain the obvious candidates to estimate UK deaths and PF went out of his way to dismiss them as 'temporary suppression'

2.3.3.3 UK cases with 21 datapoints was a high-risk potential candidate for extrapolation but turned out to have just enough information to generate a very reasonable estimate

2.3.3.4 UK deaths with 7 datapoints was an absurd dataset to use for extrapolation and yet this was the dataset that PF hinged his model on and so used to determine the fate of the UK, the USA and the world

2.4 Given the significance of PF's actions in so doing we address it separately

2.4.1 Using our input + method = output premise we break down the ICCRT R9 Figure 1a as follows

2.4.2 For input PF in ICCRT R9 presents us with a minimalist and imprecise description which nevertheless is sufficient to allow us to show that his output contradicts his input and so the output was not a consequence of his claimed input + method

2.4.2.1 PF claimed an input of an infection seeded in early January with a growth rate of doubling every five days which translates into a growth factor of 1.15 using a simple exponential or power conversion

2.4.2.1.1 This is expressed in ICCRT R9 as "Infection was assumed to be seeded in each country at an exponentially growing rate (with a doubling time of 5 days) from early January 2020, with the rate of seeding being calibrated to give local epidemics which reproduced the observed cumulative number of deaths in GB or the US seen by 14th March 2020."

2.4.2.1.2 PF fails to explain how infection might begin in early January when the first Covid-19 cases were reported as two visiting Chinese who fell ill on the 29th January

2.4.2.2 PF claimed an input of matching the modelled contagion(s) to produce the cumulative deaths to March 14th

2.4.2.2.1 This is per the same ICCRT R9 statement above

2.4.2.2.2 Thus PF is indeed going to hang the future of the UK, US and world on 7 datapoints

2.4.2.3 Already in this simple declaration of inputs PF has contradicted the real-world data of when infection actually began unless of course PF wishes to claim the government was lying about that and has maintained that lie ever since as regards WHO data

2.4.2.3.1 PF has further hung the fate of the nation on the absurdly slight evidence of nine days comprising 3 days of 1 death with an intermediate 0 death day, 1 day of 4 deaths, another zero death day, and a 2 death and 1 death day topped by a final and massively disproportionate 25 deaths day illustrating that this was not a sequence on which to hang the fate of the nation or the world.

2.4.2.3.2 Had PF or CW stated in public “we made up the day we got the first case and we’ve guesstimated from one day of 25 deaths that there’ll be 510,000 deaths” we suspect that the result would not have been lockdown but lockup.

2.4.3 Nevertheless despite the literally unreal statement as to first infection which could only be possible after January 29th after our ‘patient zeros’ had arrived we can use the claimed doubling rate of the non-existent infecteds to anchor a normal contagion curve.

2.4.4 Note that from our observations on input + method = output and clones and alternate (input + method) pairs we don’t need to use PF’s code to evaluate his claims

2.4.4.1 We found that ICCRT R9 Figure 1a can be modelled very effectively with a normal curve to peak exactly as we would expect from the history of normal curves fitting contagions from Farr to the modern day

2.4.4.2 We do not need to be concerned about the behaviour post peak except in refining our final cases and deaths figures

2.4.4.3 All we need do therefore is anchor a normal curve with a growth factor of 1.15 per day in early January such that it gives rise to 35 deaths by March 14th

2.4.4.4 Since early January refers to infections and we start with an infected ‘person’ we set the seed input for the normal curve to be 1 infected on 5th January with an associated growth factor of 1.15 strictly the fifth root of 2 or 1.148698355

2.4.4.4.1 PF may state that he used different parameters but this illustrates a method by which he could have arrived at an estimate using his own declared parameters

2.4.4.5 The curve will grow which can be thought of as an inverted fishing rod bowing upwards.

2.4.4.5.1 What we need is the rod to be just high enough that the hook sits on 35 deaths much like a fairground game of hooking the ducks with just such a fishing rod

2.4.4.5.2 Why we can’t just spear the duck at 35 deaths is because 35 infected is not 35 deaths

2.4.4.5.2.1 We need to make two adjustments to translate infected to deaths

2.4.4.5.2.2 We need an Infection Fatality Ratio which CW declared as 1% so we can use that

2.4.4.5.2.3 We need an infection-to-death lag

2.4.4.5.3 We further need an infection-to-death lag in days

2.4.4.5.3.1 We have an incubation period of around 7 days to which we add a case-death lag

2.4.4.5.3.1.1 As the UK killed people remarkably fast per cases-to-deaths lag in WHO data at between 12 hours (actual data peak to peak) or 3 to 4 days (averaging data peak to peak) we allow 7 days case-death lag to be generous and therefore use 14 days for the Infection to death lag

2.4.4.5.2.3.2 We can repeat the exercise with a 21 day infection to death lag to give an infection to death lag more consistent with eg: Germany whose chart indicates a more reasonable 14-day case to death lag with a presumed 7 day incubation from infected to diagnosed

2.4.4.5.2.3.3 For our initial run we use the 14 day lag

2.4.4.5.2.4 Thus 100 infected today will give rise to 1 death in 14 days in our recreation of a legitimate input + method approach using ICCRT R9 declared parameters

2.4.4.6 Attempting to fit a mean and standard deviation and scaling factor to generate a normal curve in this scenario would require hand-selecting three different variables for a 3 dimensional exercise which would be difficult and tedious

4.4.6.1 By contrast our Constant Growth Factor method is perfect for this scenario as two of the key parameters have already been defined being the initial value (1 infected) and the initial growth rate (1.15 as a factor)

2.4.4.6.2 Thus we need only adjust the GDF Growth Decline Factor which determines how quickly or slowly the growth fades away

2.4.4.6.2.1 We can test for limits to find out if a solution is possible

2.4.4.6.2.1.1 Using GDF = 1 the curve is exponential.

2.4.4.6.2.1.1.1 Eventual deaths will be infinite as modelled without a population constraint

2.4.4.6.2.1.1.2 The key issue is whether this exponential curve will allow at least 35 deaths by March 14th to satisfy the requirement to fit to that number of deaths

2.4.4.6.2.1.1.3 It does with 158 deaths to March 14th

2.4.4.6.2.1.2 Using GDF = 0 the curve crashes with growth factor 0 and no new infected the next day for a total infected of 1 and no deaths

2.4.4.6.2.1.3 Between the exponential 158 deaths by March 14th (GDF 1) and zero deaths (GDF 0) it is obviously possible to find a GDF that allows exactly or almost exactly 35 deaths by March 14th

2.4.4.6.2.1.3.1 The accuracy of projected deaths will increase as we increase the accuracy of the GDF but beyond four decimal places is essentially redundant

2.4.4.6.2.1.3.2 The successful GDF for the scenario is 0.998685

2.4.4.6.2.1.3.3 This is an absurdly high GDF compared to real Covid-19 contagions which typically have 0.985 or 0.986 as common figures and a short sharp contagion such as South Korea has around 0.97

2.4.5 Nevertheless it is indeed possible to fit a normal curve to the parameters specified by PF in ICCRT R9

2.4.5.1 For a given set of input parameters only one curve is possible to an arbitrary degree of accuracy

2.4.5.2 The IFR of 1% and Infection-Death lag of 14 days are consistent with UK pronouncements and figures but the same exercise can be carried out with other parameters as desired

2.4.5.3 At the specified parameters the total deaths projected for the UK are 957 using a normal curve

2.4.5.4 To reflect the slight asymmetry of the Figure 1a we create a second normal curve to represent the deaths post peak and combine the two for a final replica of Figure 1a

2.4.5.5 Thus our inputs reflect ICCRT R9 and our alternate method replicates the output of Figure 1a

2.4.5.6 With the adjustment for asymmetry the deaths projected for the UK are 1069

2.4.5.7 That figure is again somewhat lower that 510,000 UK deaths

2.4.6 If we retain the figure by Whitty of an IFR of 1% but allow PF a 21 day lag between infection and death this will have the effect of reducing deaths by March 14th so that an even higher GDF will be required to reach 35 deaths

2.4.6.1 This will give an exaggerated contagion by comparison to the 14th day figure

2.4.6.2 How exaggerated becomes clear when we discover that we now need a GDF of 0.99939

2.4.6.2.1 If the GDF for 14 days was extremely high this GDF has entered the realm of absurd at only 6/10,000ths off a pure exponential

2.4.6.2.2 This is reflected in the output which does indeed generate 35.03 deaths by March 14th before going on to a peak deaths per day of 64,429 and a total deaths of 6,528,800

2.4.6.2.3 Thus the change from 14 days to 21 days has increased the expected deaths by a factor of 5,600 times

2.4.6.2.4 This highlights the extreme sensitivity of projecting curves using seed values and any method whose output is similarly normal will suffer the same sensitivity

2.4.6.2.5 If we reduce the GDF from 0.99939 to 0.9993 a reduction of 0.01% or 1/10,000th the total deaths drops to 764,900 not dissimilar to PF 510,000 but what scientist would claim to be able to be accurate on their initial estimates to 1 part in 10,000?

2.4.6.2.5.1 Deaths by March 14th would have been 32 under this scenario

2.4.6.2.6 Drop the GDF from 0.99939 to 0.999 a reduction of 0.04% or 1 part in 2500 and the expected deaths drops to 11,379 with 25 deaths by March 14th

2.5 Thus this exercise shows a number of key points

2.5.1 Since the output of the ICCRT R9 Figure 1a curve is fitted all but perfectly to peak by a normal curve we can mimic the operation of the ICCRT R9 method with a normal curve to peak

2.5.2 Since the ICCRT R9 Figure 1a is slightly asymmetric we can discover that a pair of normal curves mimics the operation of ICCRT R9 almost perfectly throughout the contagion with a slight discrepancy in the tail of the curve which is not material

2.5.3 By setting parameters consistent with ICCRT R9 parameters and additional parameters such as the IFR and infection-death lag it is possible to arrive at a unique curve consistent with the ICCRT R9 parameters and derive from that an estimate for UK deaths

2.5.4 Projecting a curve consistent with the PF model and fitted to the initial parameters is absurdly sensitive to initial conditions

2.5.5 Had the UK happened to report 15 deaths on March 14th (total 25) and not 25 deaths (total 35) the expected deaths total using 21 days lag would have dropped from 6 million to 11 thousand

2.5.6 No model which is that sensitive to initial conditions can be considered a reasonable approach to estimating the outcome of a contagion

2.5.7 The sensitivity can hardly be considered surprising since it is extrapolating a compounding method (not strictly exponential but the same multiplicative process) from early conditions

2.5.7.1 This would be comparable to fixing a hundred metre rod near horizontally at the ground so that it can pivot upwards and then placing a block under the rod one foot from the pivot.

2.5.7.1.1 Raise the block one inch and the rod is raised nine yards close enough

2.5.7.1.2 Except that here the process is not linear but geometric, multiplicative not quite but similar to exponential

2.5.7.1.3 The entire estimate relies on the height of the block or as here the deaths reported on March 14th

2.5.8 Had the exercise been carried to March 13th with 10 deaths cumulative and the same 21 day lag the outcome would have been a total of 63 deaths

2.5.8.1 To claim that that fitting to an initial growth rate and deaths by March 14th is appropriate is absurd when just by fitting to one day prior the deaths estimate is reduced nearly 100,000 times

2.5.9 To illustrate the sensitivity of the results to initial parameters we vary three parameters being the date being matched to (with associated deaths), the infection-death lag and the infection fatality rate

2.5.9.1 The resulting deaths with associated GDF required to achieve the target deaths are shown in the following table for IFR = 1%

IFR	1%	1%	1%	1%
Lag	14	14	21	21
To	13-Mar	14-Mar	13-Mar	14-Mar
For Deaths	10	35	10	35
GDF	0.99745	0.998685	0.9979	0.99939
Tgt.Death	10.2	35.05	10.06	35.03
Tot.Death	27	1,069	63	6,004,229

2.5.9.1 The resulting deaths with associated GDF required to achieve the target deaths are shown in the following table for IFR = 2%

IFR	2%	2%	2%	2%
Lag	14	14	21	21
To	13-Mar	14-Mar	13-Mar	14-Mar
For Deaths	10	35	10	35
GDF	0.99655	0.998	0.99685	0.99855
Tgt.Death	10.27	35.02	10.22	35.07

Tot.Death	19	160	25	1,059

2.5.9.2 To have an outcome which varies 300,000 times in magnitude based on not unreasonable initial parameters is absurd but the inevitable result of attempting to project a CGF or normal curve particularly at high GDF

2.5.9.2.1 This is precisely the wrong way to attempt to model a contagion yet it is precisely how PF chose to do it

2.5.9.2.1.1 The validity or claimed validity of the model is immaterial

2.5.9.2.1.2 The outcome is a normal or normal-to-peak curve

2.5.9.2.1.3 The sensitivity is an intrinsic characteristic of normal curves as CGF curves

2.5.9.2.1.4 The GDF is the dominant parameter in a CGF curve and the closer it gets to one the more extreme the impact of even slight variations

2.5.9.2.1.5 We show a more rational approach in our examination of UK cases and projecting a curve from that information

2.6 The conclusion is simple that yes a curve can be fitted to ICCRT R9 parameters but to do so is reckless in the extreme and the resulting GDF's should signal their unreliability once they exceed 0.99 for a standard short-term contagion

2.7 At this point PF has rejected simple translations from Hubei China and South Korea

2.7.1 PF has embraced a method which is reckless in the extreme based on his parameters

2.8 We now consider the case of extrapolating from UK cases data

2.8.1 This hinges on whether we have enough data to form a reasonable estimate of the character of the contagion as defined in particular by the critical value being the GDF

2.8.2 The GDF is the critical number in projecting a contagion using the CGF model to project a normal curve

2.8.2.1 This is because while the seed value (1 case) scales the contagion linearly (a single multiplication) and the growth factor has a compounding (quasi-exponential) effect, the growth-decline factor compounds as a triangle number.

2.8.2.1.1 Thus on day one growth multiplies the cases by one growth factor and the growth is reduced by a single growth-decline factor

2.8.2.1.2 On day two the initial cases has been multiplied by two growth factors but the growth itself has been reduced by three growth-decline factors

2.8.2.1.3 By day five the cases have been multiplied by five growth factors but the growth itself has been reduced by fifteen growth-decline factors

2.8.2.1.4 Thus the GDF is by far the most critical figure to get right in projecting a curve

2.8.3 If the UK cases data gives us enough information to generate a reasonable estimate for the GDF and the contagion proceeds as a normal contagion there is a reasonable chance for the estimate being useful

2.8.4 This is far more responsible that creating a mythical growth figure which is far too low on a mythical date when no one has been infected and propping up our 100 metre stick with a figure that has trebled overnight

2.8.5 The only question is whether we do indeed have enough data for a reasonable estimate for a GDF figure

2.8.6 The simple growth figure is today's cases over yesterday's cases and that is far too wild to be useful

2.8.6.1 We can tame that using a centred 7-day average and then calculate the growth rate as today's seven day average cases over yesterday's 7-day average

2.8.6.2 That is substantially better but still generate a wildly oscillating curve

2.8.6.3 If we take a centred seven day average of the growth rate derived from the seven day average of the cases we finally get a curve which is clearly declining as a trend and which is gently oscillating

2.8.6.4 We can insert a gradient (GDF) for an estimated trend in the growth rate plotted on log scales where we then expect the trend to be a linear descent

2.8.6.5 By assigning a seed growth rate on an arbitrary date we can plot a nominal growth trend for the contagion

2.8.6.6 Raising the seed growth rate raises the plotted trend and lowering it does likewise

2.8.6.7 Raising the GDF (closer to 1) reduces the gradient of the decline and lowering it increases it

2.8.6.8 By judicious choice of GDF and growth rate we find that for the UK cases a GDF of 0.99 provides a reasonable gradient and that a seed growth rate of 1.9 as a factor on 1st Feb places the growth-decline line at the top of two peaks of our gently oscillating and descending actual growth-decline wave/line.

2.8.6.9 By keeping the GDF of 0.99 and setting the growth rate to 1.8 the nominal growth-decline line touches two adjacent troughs of the descending actual growth-decline line.

2.8.6.10 Thus we have an actual growth-decline line that is descending as expected and which can be fitted for an apparently reasonable GDF of 0.99 with a growth rate between 1.8 and 1.9 on the 1st February

2.8.6.11 1st February is the date on which the UK reported 2 cases to the WHO which is 3 days behind their UK occurrence as reported in the media but that time-lag is not material

2.8.6.11.1 This contrasts with the exercise with ICCRT R9 parameters where changing the date changed the time available for the contagion to reach the required 35 deaths as did changing the infection-death lag

2.8.6.11.2 There we had to choose the GDF to fit to the pre-selected growth rate and cumulative deaths with the extreme results that we say

2.8.6.11.3 Here we are reading the GDF directly from the observed growth in cases with a proper 21 days that may just be enough to give a sensible estimate

2.8.7 Using the 1.9 growth factor and a GDF of 0.99 we project the curve using the CGF arithmetic

2.8.7.1 Rather than relying on the sporadic and wildly variable early cases we work from the latest daily cases being March 14th to be in keeping with ICCRT R9

2.8.7.2 By this point the contagion should be more stable and well-established

2.8.7.3 Using our seed growth rate on 1st February and the GDF we can generate the nominal growth rates for any arbitrary period

2.8.7.3.1 Each day forward of the reference date we reduce the growth rate by multiplying the previous day's growth rate by the GDF

2.8.7.3.2 Each day prior to the reference date we increase the growth rate by dividing the following day's growth rate by the GDF

2.8.7.4 For March 15th cases we take the March 15th growth rate calculated as above and multiply the March 14th cases by the growth rate

2.8.7.5 For dates prior to March 14th we take the following day's cases and divide by the following day's growth rate

2.8.7.6 In this fashion we generate a nominal cases which is a normal curve

2.8.7.6.1 We can do likewise but basing the seed cases on the 7-day centred average of cases on March 14th

2.8.7.6.2 Since the 7-day centred average on March 14th relies on data to March 17th we can be slightly more realistic in modelling the opportunity on March 14th by seeding the curve to the 7 day average on March 11th

2.8.7.6.3 Thus we have three seed values for cases on two different dates but we should hope and expect that they will not differ substantially in output

2.8.8 For each curve in cases we can apply a case-death lag and a Case Fatality Ratio (CFR) to convert expected cases into expected deaths

2.8.8.1 For the case-death lag we would normally use a 14 day lag but the UK reported a case-death lag as little as 12 hours by actual data and 3 to 4 days by reported data peak to peak so we will use a 7 day lag

2.8.8.1.1 Notice again that unlike the ICCRT R9 parameters exercise the lag doesn't affect the calculation but merely the timing of the resulting deaths curve

2.8.8.2 For the CFR this will of course significantly changed the estimate for deaths in direct proportion to the CFR chosen

2.8.8.2.1 An obvious reference CFR should be the 4.55% CFR experienced by Hubei

2.8.8.2.2 Had PF wished to be conservative he might perhaps have used 10%

2.8.8.2.2 Had PF had a crystal ball he would actually have had to use 20%

2.8.8.2.2.1 If deaths had indeed occurred as they should 14 days after cases then that CFR approaches 100%

2.8.8.2.2.2 That is a prime fraud indicator but not material to our analysis here

2.8.9 For our three curves we obtained case estimates of 119,931, 91,258 and 105,443 respectively

2.8.9.1 For only changing the seed value from actual to average, and from average to average three days earlier, those are notable changes but not alarming

2.8.10 Applying the Hubei CFR of 4.55% we get 5,458 vs 4,153 and 4,798 respectively

2.8.10.1 Applying 10% CFR we get 11,993 vs 9,126 and 10,544 respectively

2.8.10.2 Applying 20% CFR we get 23,986 vs 18,252 and 21,089 respectively

2.8.11 Essentially therefore we're looking at 100,000 cases and 5000 deaths at Hubei CFR, 10,000 deaths at 10% CFR and 20,000 deaths at 20% CFR

2.8.12 Notice that 5,000 deaths from a best-efforts extrapolation of UK case data using the Hubei CFR is not absurdly different from the 3454 deaths as a direct translation from Hubei deaths (which of course generate the Hubei CFR) to UK deaths by scaling the population.

2.8.13 While we would not stretch to such an optimist might suggest that this showed that lockdown or intervention was likely to reduce deaths from 5000 to 3454 or around 30%

2.8.13.1 Had that been declared that we could save around 1600 deaths or roughly one day's deaths in the UK we wonder if the nation would have been quite so keen to see lives and livelihoods destroyed for one day's deaths

2.8.13.2 Had the British people appreciated by now that lockdown hasn't saved a single case or life as is readily seen by growth-decline analysis then we would long be out of lockdown as a useless and harmful procedure

2.8.13.2.1 Naturally the government has no intention of allowing the people to recognise that lockdown had zero effect

2.8.13.2.2 The agenda is clear and publicly asserted: massive threat, lockdown, wait for the vaccine

2.8.13.2.3 We are demonstrating that the massive threat is false

2.8.13.2.4 We readily demonstrate that the effectiveness of lockdown is nil

2.8.13.2.5 We have the vaccines being rolled out and the first vaccine deaths reported

2.8.13.2.6 This is either the biggest win for fraud and the pharmaceutical industry or setting up for a second Nuremberg

2.8.14 The exercise has used a standard symmetrical normal curve

2.8.14.1 We can take the normal achieved and introduce an asymmetry to replicate the curve in ICCRT R9 Figure 1a

2.8.14.2 Doing so increases the population and deaths by an order of 5%

2.8.14.3 This does not materially increase the estimates so we omit those results here

2.8.15 Overall the exercise has been reasonable and produced results consistent with Hubei which increases our confidence in it

2.9 At this point PF has rejected simple translations from Hubei China and South Korea

2.9.1 PF has embraced a method which is reckless in the extreme based on his parameters

2.9.2 PF has rejected a straightforward but somewhat more sophisticated translation from UK case data to a projected contagion with associated deaths

3.0 ICCRT R9 Figure 1a Negated By Contradiction

3.1 We now show that the claimed output from the PF parameters contradicts those parameters

3.1.1 Once the declared parameters are contradicted there is no connection between the input parameters and the output Figure 1a

3.1.1.1 ICCRT R9 Figure 1a becomes an orphan and an artefact of invention

3.2 Recalling our discussion of input + method = output the output of ICCRT R9 is Figure 1a in particular the projected deaths curve for the UK

3.2.1 We can match the curve to peak with a simple normal curve with parameters a peak date of 23rd May, a standard deviation of 13.67 days on a daily plot of deaths and a scaling factor (total nominal deaths) of 730,000

3.2.2 Figure 1a has a scale graduated in deaths per 100,000 population

3.2.2.1 We use a standard population of 100 million being a convenient figure between the UK nominal 66.25m per March 3rd 80% and 1% deaths = 530,000 deaths and the US population at 330 million

3.2.2.2 Thus 5 on Figure 1a as deaths per day per 100,000 population is 5000 per 100m population

3.2.2.3 At 66.25m population 5000 per day is equivalent to 5000 x 66.25 / 100 = 3312.5 deaths per day

3.2.2.4 Using 5 intermediate horizontal lines per 5(000) Y interval each line represents 662.5 deaths per day

3.2.2.5 By deleting the background of a capture of ICCRT R9 Figure 1a and rendering the image transparent for background and semi-transparent for the curve we can overlay Figure 1a on an Excel chart and see that the fit between the normal and Figure 1a is essentially perfect down to a level of one third of the first horizontal line or around 221 deaths a day.

3.2.2.6 Before that the slight divergence visible becomes a material percentage of the day's figures and the curve becomes lost so that no useful values can be extracted with the precision required.

3.2.2.7 Thus we draw an effective boundary that our clone or alternate derivation of ICCRT R9 output is indistinguishable and definitive from 12th April onwards to peak whence the normal curve shows 237 deaths per day rising to a peak of 21,300 deaths per day 23rd May

3.2.2.7.1 These figures are stated per 100m population

3.2.2.7.2 Translated into UK figures these are that we consider the chart definitive beyond 12th April when UK deaths are presented as 157 deaths per day rising to 14,111 deaths per day on the 23rd May

3.2.3 Since our curve matches the Figure 1a curve definitively beyond 12th April to peak we can treat the characteristics of our curve as being identical to that of Figure 1a and hence the ICCRT R9 model or claimed model

3.2.2 For figures before 12th April we would not claim precision as to the fit at what are increasingly small number reducing to tiny fractions of an individual death or case or infected

3.2.2.1 Thus we would not make claims that are definitive before 12th April but we can highlight the output of our curve to highlight likely orders of magnitude of the supposed Figure 1a output

3.3 PF makes two claims as to input being the following

3.3.1 Infection was seeded at a rate of doubling every five days in early January

3.3.2 Contagions were seeded to reproduce cumulative deaths to 14th March

3.4 Since 14th March is before our cutoff of 12th April we will not make an explicit claim with regard to the March 14th parameter but we will illustrate what our curve gives for a cumulative deaths figure to that point

3.4.1 The media were reporting on 15th March that deaths had reached 35 thus 35 on the 14th March

3.4.2 WHO reports a total of 29 deaths for the 15th March and 43 for the 16th

3.4.3 Thus it appears that WHO was as is reasonable being updated a day late and that the media report of 35 deaths in total was accurate for the 14th March

3.4.4 If we find a definitive UK government report for the 14th March we will update this but it is reasonable to supposed that the media report was accurate and that therefore PF was fitting to a total cumulative deaths of 35

3.4.5 The total cumulative deaths of our curve in UK figures is 0.09

3.4.5.1 Figure 1a and the ICCRT R9 model would have to be substantially different in these early days to somehow have 35 deaths as its theoretical output being nearly 400 times larger

3.4.5.2 If our curve was an accurate representation of Figure 1a then the claimed fit to cumulative deaths to March 14th would be fraudulent

3.4.5.3 Nevertheless we cannot definitively assert what the Figure 1a model showed as output and therefore we do not assert that as a definitive claim

3.5 We can however make a definitive claim with regard to the first parameter of doubling every five days in early January

3.5.1 As that was for infection we can allow a very generous 21 days from infection to death

3.5.1.1 This is far longer than the infection-to-death interval implied by reported cases and deaths since if we allow 7 days for incubation there are then only a further 12 hours by actual peak or 3 to 4 days by averaged case-death lag in UK cases and deaths figures

3.5.1.1.1 That is a primary fraud indicator against the UK government but is not material here beyond indicating that a 21 day infection-to-death interval far exceeds the UK official interval per its reported cases and deaths and is not unreasonable for a responsible government's report for that lag between infection and death

3.5.2 Using a 21 day from infection to death we can treat the growth rate of doubling every five days in early January for infections to be reflected in a doubling every five days in deaths 21 days later

3.5.2.1 We trust that it is obvious that for a nominal case trajectory from infection to symptoms to illness and hospitalisation and death that for a large population or model we can treat each as following on after a typical interval and at a typical percentage such as here IFR or infection fatality rate

3.5.2.1.1 This is not in fact the model followed in the prominent epidemiological compartmental models but the flaws in those models are outside the context of this part of our testimony

3.5.2.2 Thus we can reasonably state that to be consistent with PF's claimed parameters the death rate must be consistent with a doubling of deaths every five days at the end of January

3.5.2.2.1 In practice the UK will not have its first death till the 7th March (WHO data) nearly five weeks later but in using a smooth curve to represent the contagion we have no objection to fractional deaths in the output

3.5.2.2.1.1 Once the death count per day becomes noticeable and measurable in the tens, hundreds or thousands the fractional nature of the curve will be immaterial

3.5.2.2.2 By the nature of a normal curve it is an intriguing and very powerful observation that the growth rate of a normal curve declines at a constant rate when expressed as a factor

3.5.2.2.2.1 This observation eventually led us to develop the simple but again powerful technique of the Constant Growth Factor curves whereby today's growth factor is yesterday's growth factor multiplied by a growth-decline factor and whereby today's cases (or deaths as appropriate) are yesterday's cases (or deaths) multiplied by today's growth factor

3.5.2.2.2.2 The critical observation here is that the constant rate of decline and the readily determined growth factor allows us to determine on what date a particular growth factor was achieved if it was present at all

3.6 This is the critical observation regarding our curve and by its definitive match to Figure 1a about the curve portrayed in Figure 1a

3.6.1 Strictly our single curve is an effectively perfect match only to peak but that suffices for our needs here

3.6.2 PF claims he seeded the model with a growth rate of doubling every five days in early January for infections which maps to a doubling every five days in deaths by late January

3.6.2.1 Doubling every five days translates to a growth factor of 1.15 by taking the fifth root of 2 (=Power(2,1/5) in Excel) or more precisely a factor of 1.148698355

3.6.3 Yet our curve does not have a growth factor less than 1.15 until the 28th April well after the 12th April from which point we consider our curve to be a definitive fit to Figure 1a to peak

3.6.4 Thus we can state with certainty that Figure 1a the official projection of the ICCRT R9 model will also not reach a growth factor of around 1.15 until the same date likely exactly the same date

3.6.5 On the prior day 27th April our curve shows a growth factor of 1.1523

3.6.6 On the 12th April the first day or last day preceding that we consider we have a definitive match for Figure 1a the growth factor is 1.25

3.6.7 With no evidence to the contrary we have a normal curve that is a definitive match to Figure 1a from 12th April and so it is reasonable to say that the character of the curve is unlikely to materially change before the 12th April and certainly the Figure 1a curve shows no behaviour inconsistent with a normal or near normal curve prior to 12th April

3.6.8 We cease to regard our fit as definitive not because it is contradicted by the image Figure 1a but simply because the Figure 1a curve becomes indistinct and indistinguishable from the x axis as y values drop to extremely low levels

3.6.9 We do not make an absolute claim as such but point out that on the 1st February at a time that deaths should be experiencing growth as ‘doubling every five days’ instead in our curve the growth factor is 1.83

3.6.9.1 To put this into perspective by raising to the power 5 instead of doubling in 5 days our curve is increasing at the rate of 20 times in five days and we would expect the Figure 1a curve to be doing similarly

3.6.9.1.1 That is a substantial difference from merely doubling in 5 days which already seems dramatic enough

3.6.9.1.2 The reason such high rates are not noticeably is precisely because they apply when the contagion is merely a fractional entity with deaths on that day of 0.00000000004 in UK terms

3.6.9.1.3 In practice in the real-world of contagions and their early growth rate factors can be as high as 3 or 4 or 7 or even higher

3.6.9.1.4 To go from zero cases to 3 cases or even 1 case is infinite growth

3.6.9.1.5 Growth rates which appear high to people who insist on thinking in terms of exponential growth are in fact far too low to be realistic when dealing accurately with normal contagions

3.6.9.1.6 Thus a contagion doubling every five days sounds like a significant or massive threat exponentially where a first case on January 1st will pass a million cases a day and 2 million cases total by April 10th and will exceed 33 million cases a day and the entire population being cases in total by 5th May

3.6.9.1.7 Yet a normal contagion as Covid-19 and all other contagions properly resemble at a typical Growth Decline Factor of 0.985 and initially 'doubling every five days' will peak at 1.76 cases per day (that's less than 2 cases per day) and be complete with 31.33 cases in total.

3.6.9.1.7.1 That is the difference between the mythical exponential virus and the actual normal virus reflected in Covid-19 and in all other contagions historically

3.6.9.1.8 Thus to someone steeped in the myth of the exponential virus doubling every five days seems high and suitably threatening

3.6.9.1.9 PF supports this impression with his declaration "Infection was assumed to be seeded in each country at an exponentially growing rate (with a doubling time of 5 days) from early January 2020, with the rate of seeding being calibrated to give local epidemics which reproduced the observed cumulative number of deaths in GB or the US seen by 14th March 2020."

3.6.9.1.9.1 This is also the declaration from which we derive his two key parameters

3.6.9.1.10 Thus while it may appear a drastic and disturbing rate it is in fact far too small to be of interest for a real contagion at such an early stage

3.6.9.1.10.1 And that is despite the Figure 1a contagion having an abnormally high GDF (Growth Decline Factor) of 0.99467 where typical Covid-19 contagions have GDF in the range of 0.985 or 0.986 and short sharp contagions like South Korea have contagions closer to 0.97

3.6.9.1.10.2 The effect of such a high GDF is that the growth rate is sustained at a higher rate for longer greatly exaggerating the total cases or deaths

3.6.9.1.10.3 The problem is that PF and epidemiologists appear not to think in terms of normal despite Farr and his accurate 1840 observation

3.6.9.1.10.3.1 As such they appear to think in the mythical exponential and the necessary low growth rates because true exponential contagions if they existed would so rapidly get out of hand

3.6.9.1.10.3.2 We should note that exponential growth is now embedded as official government policy based on the Vallance Whitty briefing of 21st September and the joint declaration of 25th September both of which reference the exponential growth of the contagion

3.6.10 What Figure 1a would actually claim if we had access to its precise underlying values we cannot say but we can say what growth rate Figure 1a cannot claim

3.6.10.1 Our curve and by its definitive match post 12th April the Figure 1a curve also do not decline to a growth factor below 1.15 until the 28th April

3.6.10.2 On the last date preceding that we consider we have a definitive match the 12th April the growth factor is 1.25 significantly higher than 1.15

3.6.10.3 The normal curve has a consistently declining growth rate declining at a constant rate

3.6.10.4 The exponential curve has a constant growth rate

3.6.10.5 The growth rate for Figure 1a cannot be increasing prior to 12th April without becoming something even epidemiologists don't claim: a contagion with accelerating growth

3.6.10.6 To seed a model in late January for deaths equivalent to seeding a model in early January in infection such that its growth factor has declined to 1.15 on the 27th to 28th April the original seeding figure in January must be higher than the 12th April figure of 1.25 and likely not dissimilar to the pure normal figure of 1.83

3.6.10.7 Simply put PF cannot have seeded the output ICCRT R9 Figure 1a with a rate of 1.15 in early January (late January for deaths) because the growth rate in Figure 1a will not be that low until the 28th April

3.6.10.8 Thus the projected curve illustrated for UK deaths in Figure 1a does not reflect the claimed growth rate declared by PF in ICCRT R9

3.6.10.9 While we cannot be definitive it is extremely unlikely also that it matches the claimed deaths figure of 35 cumulative deaths

3.6.10.10 ICCRT R9 Figure 1a is independent of the claimed parameters if even only one parameter is inconsistent with the output Figure 1a

3.7 We can state with certainty that Figure 1a does not reflect a curve seeded with a growth rate of doubling every five days in January whether early January for infection or late January for death

3.8 By showing that Figure 1a is disconnected from its claimed input by the contradiction of a claimed growth rate in January occurring only in late April we have disconnect Figure 1a from any 'scientific' basis

3.9 ICCRT R9 Figure 1a is contradicted by multiple scenarios which are legitimate estimates for the UK contagion and associated deaths as already set out

3.9.1 ICCRT R9 Figure 1a exaggerated each of those alternate scenarios by a minimum 100 times

3.9.1 Those alternate scenarios were legitimate estimates based on Covid-19 data including two completed contagions Hubei (cases and deaths) and South Korea (cases)

3.9.2 Regardless of the validity or lack thereof of the PF code the Figure 1a output contradicts the claimed input and so the quality of the code is moot

3.9.2.1 The input which might have been reasonable or not but which included infection weeks before the first actual case in the UK was not followed to generate the output

3.9.2.2 The output Is not associated with the input and so it is an insert, a cuckoo's egg planted in an in-depth report whose validity is immaterial

3.9.2.3 Figure 1a contained the only thing that the mainstream media would care about being how many Britons and Americans would die and it was not connected with the report at all since its sole connection was the declared parameters and they have been shown to be inconsistent with the output

3.9.2.4 ICCRT R9 was inserted we suggest with the express purpose of backing up the Whitty declaration of 80% infected and 1% dead and supporting the policy of lockdown

3.9.2.5 With declared expected deaths of 510,000 Britons echoing Whitty and the media's declaration of 530,000 deaths no material resistance to lockdown arose and we duly entered lockdown on March 23rd a scant week after the publication of this radical unreviewed report

3.9.2.6 Had the public been notified honestly that multiple alternate estimates suggested a contagion with a few thousand deaths not 510,000 deaths we doubt they would have been so compliant

3.9.2.7 That the UK did indeed amass 40,000 deaths in the primary contagion neither validates PF nor invalidates the estimates

3.9.2.7.1 With a death rate of 20% at peak and approaching 100% lagged 14 days Britain was killing Covid-19 patients far beyond the 4.55% figure experienced in Hubei and that was only one factor in the grievous discrepancy between the UK and the Far East and Africa where typically they experienced deaths 100 times lower than the UK

3.10 None of which alters the fact that ICCRT R9 Figure 1a is not connected to the parameters claimed to give rise to it and so it is a figure of invention not science

4 We have shown by alternate rational methods for estimating the UK contagion and by analysis of the Figure 1a characteristics that ICCRT R9 Figure 1a was in no way connected to or reflective of the real-world data on Covid-19 or even the claimed parameters set out by PF in ICCRT R9

4.1 ICCRT R9 Figure 1a and its associated 510,000 UK deaths and 2.2 million US deaths were a matter of invention and choice by PF unconnected with the real-world or his declared parameters

4.2 ICCRT R9 Figure 1a exaggerated legitimate alternate estimates over 100 times in each case

4.3 PF thereby published a figure exaggerating legitimate estimates of the Covid-19 threat over 100 times

4.4 PF thereby supported and greatly facilitated the implementation of lockdown a policy which has done immeasurable harm

4.5 PF thereby misrepresented the actual threat of Covid-19 with a view to supporting a policy which has done immeasurable harm and thereby is guilty of fraud and by being the cause of harm is guilty of criminal fraud

5 Lockdown Failed To Be Effective

5.1 As an obvious defence is that lockdown saved lives we address this point briefly

5.1.1 The effectiveness of lockdown or lack thereof has no impact on the fraudulent nature of ICCRT R9 Figure 1a which is based solely on the disconnect between the claimed parameters and the output and the disconnect between the output deaths and real world comparisons

5.1.2 Lockdown in fact can be proven to have had zero effect on the contagion

5.1.2.1 This is true in the UK

5.1.2.2 This is also true in 51 other contagions we assessed including Australia and New Zealand

5.2 Claims published as to lockdown effectiveness are fraudulent

5.2.1 In each claim that we have seen one of the following is stated or implied

5.2.1.1 Growth rate is reducing

5.2.1.1.1 No, that is what happens in every normal or humped contagion

5.2.1.2 Cases are reducing

5.2.1.2.1 No that merely means that the contagion is past peak as happens in every normal or humped contagion

5.3 Since lockdown was implemented with the stated purpose of flattening the curve claims that flattening the curve is being achieved are likewise fraudulent on the same grounds

5.4 Since the growth rate of a humped or quasi-normal or normal contagion is reducing throughout the primary contagion it is insufficient to say that lockdown is working because the growth rate is reducing

5.4.1 The growth rate must be reducing at a significantly faster rate than it was prior to lockdown for there to a legitimate claim to the possible benefit of lockdown

5.4.2 If the growth rate continues to decline at a rate consistent with its rate of decline prior to lockdown then the lockdown has had zero effect

5.4.2.1 In the UK this can hardly be a surprise with 63% of deaths occurring in hospital 30% in care homes and 80% of hospital deaths being in patient diagnoses

5.4.2.1.1 The government admits to a figure of 16% to 25% for inpatient infection but with 80% being inpatient diagnoses the true figure may well be higher

5.5 To test whether the decline in growth has accelerated is simple

5.5.1 Calculate the growth rate

5.5.1.1 As previously described this is done typically as today's average cases over yesterday's average cases using a 5 day or 7 day centred average

5.5.1.2 If this is still to variable then a further average of the growth rate may be useful

5.5.2 Note the start date of lockdown

5.5.2.1 Due to incubation lockdown is not expected to be effective on the start date

5.5.3 Note the effective date of lockdown being the start date of lockdown plus incubation typically 7 days

5.5.4 Observe whether the growth decline was established as a trend before lockdown and certainly before lockdown became effective

5.5.5 Note whether the growth decline was established as a trend after lockdown and after lockdown became effective

5.5.6 If both trends are clearly established and they are consistent with each other then lockdown has not changed the trend and so lockdown had zero effect

5.6 By this clear and straightforward test we can definitively state that lockdown had zero effect in the UK