



# The Next Phase

## Recovery of T&O Surgery

Wednesday 13th May 2020

British Orthopaedic  
Association

# Speaking today

- **Mr Bob Handley**, Vice President, British Orthopaedic Association - Trauma
- **Professor Philip Turner**, Immediate Past President, British Orthopaedic Association
- **Professor John Skinner**, Vice President Elect, British Orthopaedic Association
- **Professor Deborah Eastwood**, Past Honorary Secretary, British Orthopaedic Association
- **Professor William Harrop Griffiths**, Council Member Chair, Clinical Quality & Research Board, Royal College of Anaesthetists



- *“This means we are now asking all NHS local systems and organisations working with regional colleagues fully to step up non-Covid19 urgent services as soon as possible over the next six weeks.....”*
- *“In addition, you should now work across local systems and with your regional teams over the next 10 days to make judgements on whether you have further capacity for at least some routine non-urgent elective care.”*



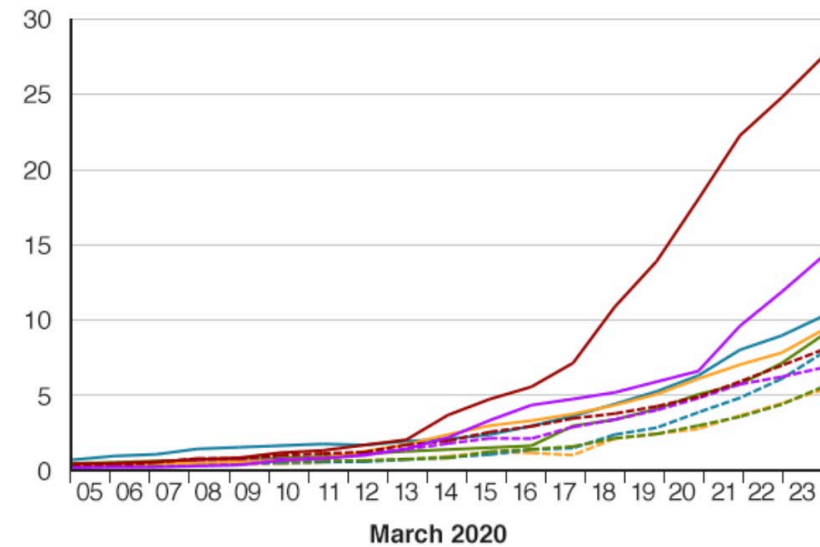
# Guidance

- Evidence is developing
- Lack of central guidelines
- Regional variation in epidemic
- Geography
  - Region
  - City
  - Hospital

Infection rates per 100,000 population



Cases per 100,000



# Caution

- Still marked restriction of movement
- Level 1a and 1b cases to be managed
- Catch-up required for Level 2 (4 weeks)
- Infection risks
  - Patient to staff
  - Staff to patient
  - Staff to staff
  - Patient to patient



# Readiness for re-start

- Recovery management team
- Agreement with Commissioners, Executive and MD
- Establish Green and Blue systems
- Criteria to fulfill
  - Space
  - Staff
  - Stuff
  - Systems



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# Patient journey

- What is on the waiting list?
- What does the patient want?
- What is still coming into the system?
  - Self management resources
  - Referral pathways
  - Triage



# Prioritisation

- NHSE document
- Time critical condition
- Patient risk profile
- MDT review



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# Surgical pathway

- Pre-habilitation and preparedness
- Pre-operative assessment
- Consent
- Isolate / shield for 14 days
- Test 48 hours
- Screen at admission

# Theatre

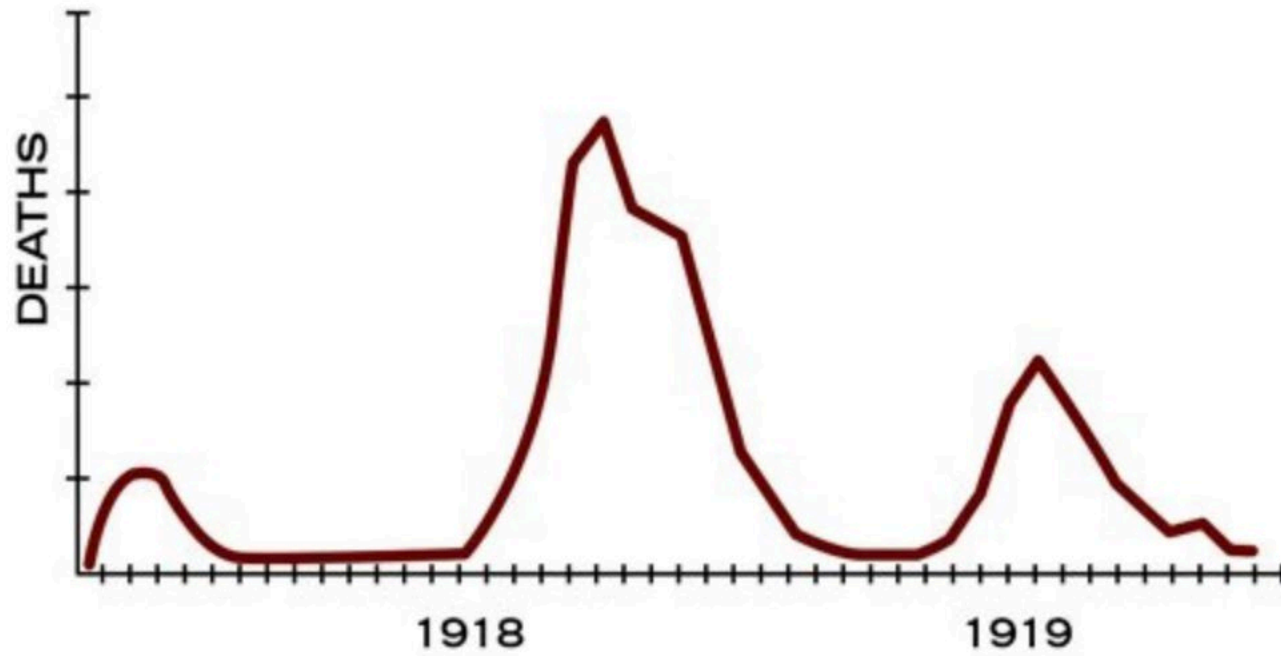
- Green team
- LA / Regional blocks
- SOP as developed
- More staff outside, least staff inside
- Experienced staff
- 50% throughput
- Dual consultant operating
- No company reps

# Discharge

- Planned
- Enhanced recovery and early discharge
- Directed rehabilitation
- Remote follow-up
- Audit
  - Outcomes
  - COVID-Surg



# Be prepared.....

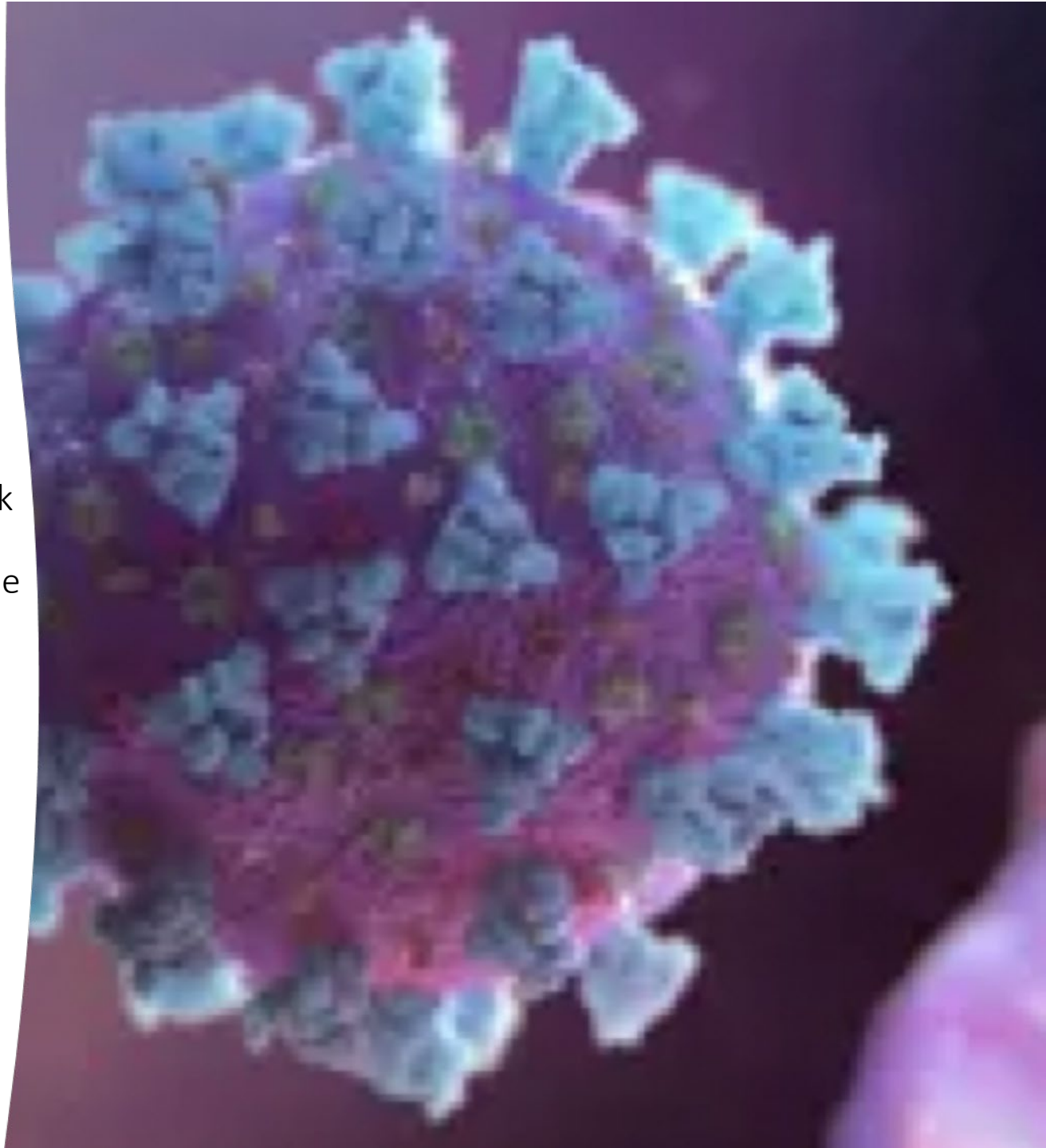


# Why are we here?

- 11<sup>TH</sup> March 2020 – SARS-CoV-2 Virus
- COVID-19 will remain endemic, with probable peaks
- Elective surgery is important and transforms lives
- The national NHS steer is for elective and non-elective work to be separated as far as possible, using rigorous infection prevention control measures, so that elective activity can be maintained
- The Guidance outlines a gold standard, but includes silver and bronze standards, acknowledging that there will be justifiable reasons to deviate from Gold
- Inequalities for our population in accessing health care are an important consideration when implementing this guidance.



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# Key Principles

## Principle 1

- Separated care pathways for urgent and planned care to aim to eliminate risk of nosocomial infection
  - Physically separated
  - Staffing separated
- COVID protected (green)
  - Elective care pathways for test negative COVID-19 patients
- COVID risk managed (blue)
  - Urgent and emergency care in a defined zone
  - Reduce risk of nosocomial transmission when care cannot be delayed and testing status of patient not known

## Principle 2

- Access NHS care sites for all patients and staff is determined by their COVID status (screening, testing)
- Access controlled by exemplary IPC and PPE compliance



# Care areas to consider

- Patient considerations
  - Informed consent re risks
  - Agreement to comply with requirements
  - Ability to comply with requirements
    - Mental Capacity
    - Social and other factors
  - Healthcare inequalities

## COVID-19 (Coronavirus)

On 11 March 2020 the World Health Organization confirmed COVID-19 (coronavirus) has now spread all over the world (this means it is a 'pandemic'). Hospitals have very robust infection control procedures. **If you catch the coronavirus, this could affect your recovery and might increase your risk of pneumonia and even death. Talk to your healthcare team about the balance of risk between waiting until the pandemic is over (this could be many months) and going ahead with your procedure.** If your procedure is routine (rather than urgent), your doctor may recommend a delay.

Please visit the World Health Organization website: <https://www.who.int/> for up-to-date information.



# Can we make Covid-19 free sites?

	Gold	Silver	Bronze
Buildings	Single point of access with COVID checkpoint	Single point of access with COVID checkpoint	Single point of access with COVID checkpoint
	Separate site	Building that can be physically separated into distinct areas with completely separate entrance and no contact with blue staff/patients	Department that can be physically separated from other areas, but unable to achieve complete separation eg walk through common area en route to department
Diagnostics	Separate facilities	Separate entrances and rooms	Separate time slots/ strict cleaning
Staff (in work considerations, out of work also needed)	Robust screening/ testing Separate teams	Robust screening/ testing Separate teams for defined time periods	Robust screening/ testing COVID checkpoint and full change/shower
Co-dependancies (eg renal replacement)	Co-dependancies available on same green site	Co-dependancies available on same site but with green/blue split	Co-dependancies available on different site but with green/blue split





# Patient Risk Stratification of receiving elective care in an ongoing COVID-19 pan/endemic

Time criticality of procedure

Additional COVID risk related to procedure (or co-morbidities)	Time criticality of procedure				
	1a <24h	1b <72h	2 <4w	3 <3m	4 >3m
C Low					
B Moderate					
A Extreme					

- Individual specialties will need to map their patients and use a similar grid to inform MDT discussions and patient consent
- Eg: frail elderly with co-morbidities (A) need careful discussion of elective hip replacement (C, 4)
- Eg: complex cardiac surgery (A) need rigorous IPC to manage 1a, 1b



# Screening and Testing

## Screening

- COVID Screen
  - Perform a
  - Contact history
  - Symptom check
  - Temperature check
- Non-specific tests
  - Only use in high risk treatment/patient
  - Lymphocyte count
    - Low with COVID-19
  - Acute phase reactants
    - Ferritin/LDH/D-dimers
    - Non-specifically raised
  - CT chest ?

## • COVID – specific testing

### “Swab”

- PCR
  - 24-48h
  - Testing for acute infection
  - False negative rate
- Rapid antigen test
  - Approx 2h
  - Testing for acute infection
  - False negative rate
- Antibody testing
  - IgG
  - Laboratory ELISA or POCT (LFIA)
  - Marker of previous infection
  - Best sensitivity 14d after infection
  - LFIA may have poor sensitivity
  - Role unclear at present



# Staff Screening and Checking

## Screening

- Symptoms and temp check
- Minimum daily

Continue PPE use in all settings in line with PHE guidance regardless of staff testing results

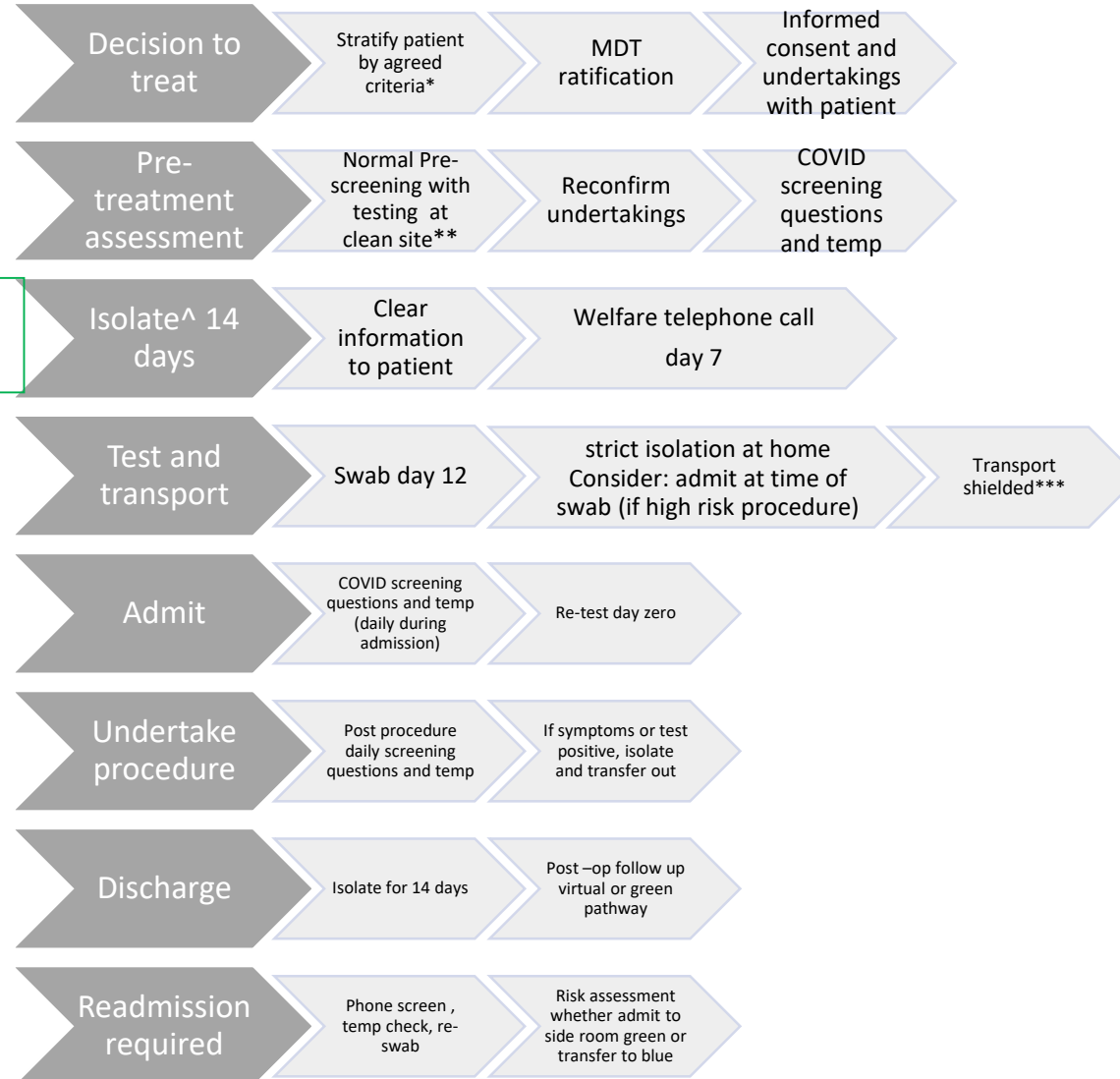
## Testing

- Always swab/rapid test if symptomatic
- Consider regular swab tests
  - Frequency TBC
- Role of antibody tests unclear
  - Do not use to prioritise staff or change PPE requirements

# Green admitted pathway

Note: pathways in this paper assume rapid testing not universally available. Pathways can be modified to accommodate rapid testing if widely available in appropriate volumes.

^isolation will need clear definition: reduce unnecessary contact with others in line with current "lock-down" criteria



\* If cannot isolate for 14 days due to urgency, consider not green or add in additional screens

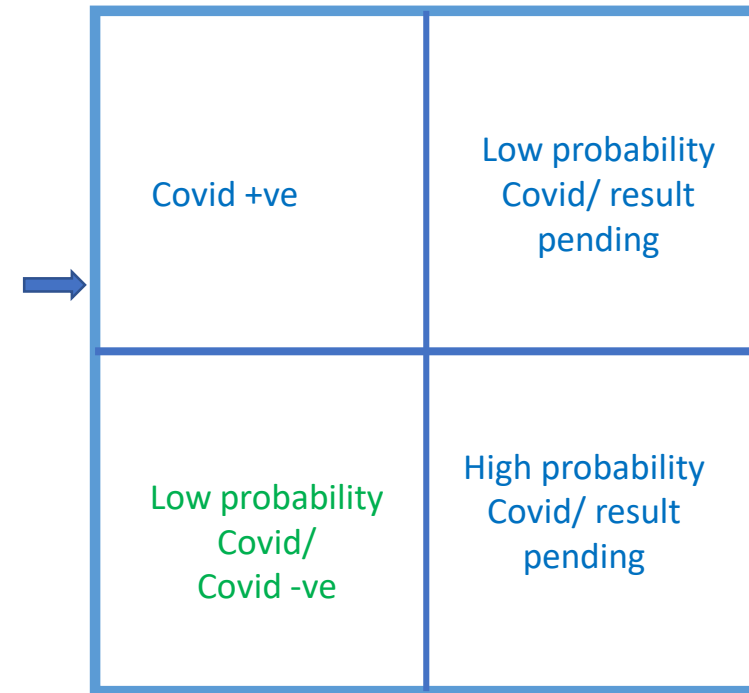
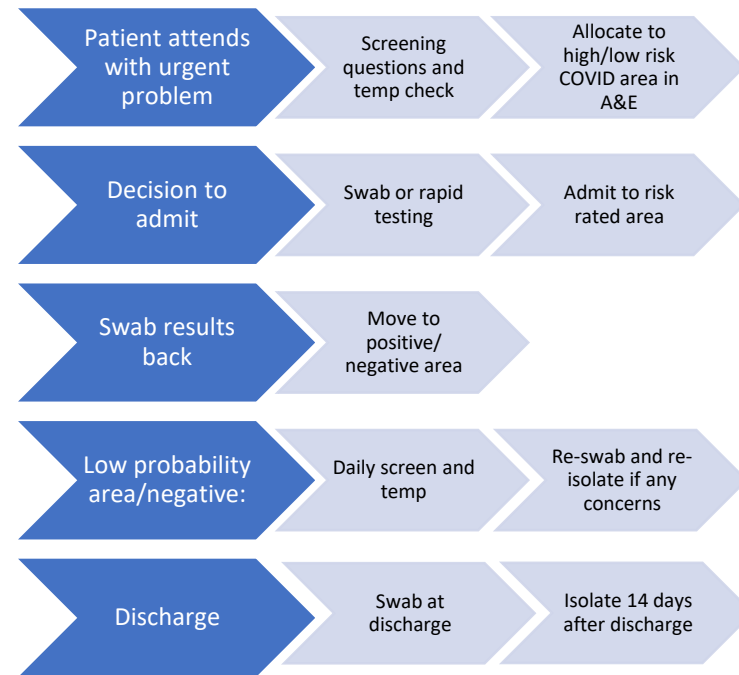
\*\*clean testing site separate to main green hub

\*\*\*not public transport, screened staff

Patient becomes symptomatic at any point: isolate and transfer to blue site

# Blue admitted pathway

Note: pathways in this paper assume rapid testing not universally available. Pathways can be modified to accommodate rapid testing if widely available in appropriate volumes.



## NB:

if a patient presents via A&E they are automatically in a blue pathway unless they can be discharged and not admitted for 14 days

In exceptional circumstances, enhanced screening and isolation may permit their use of a green facility/pathway.



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# What about the kids?

## Overview

- <2% of total case numbers
- 0.01% mortality = to the 'flu'

## PIMS -TS

- Paediatric Inflammatory **M**ultisystem **S**yndrome –
  - Temporally **A**ssociated with SARS-CoV-2
    - 28% *antigen positive* RT-PCR
    - 85% *antibody positive* SARS-CoV-2 IgG
    - Mortality unknown ...



# Paediatric Trauma

## Carry on doing what you are doing ...

- Day Case conservative treatment where possible
- Easy-to-remove / unwrappable casts or splints
- Virtual follow-up
- On line or 'Hot line' resources for advice & exercises
- Expect the 'surge'
- Ensure good robust pathways in place



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# Paediatric Orthopaedics

## DDH and CTEV (Ponseti) Clinics ..

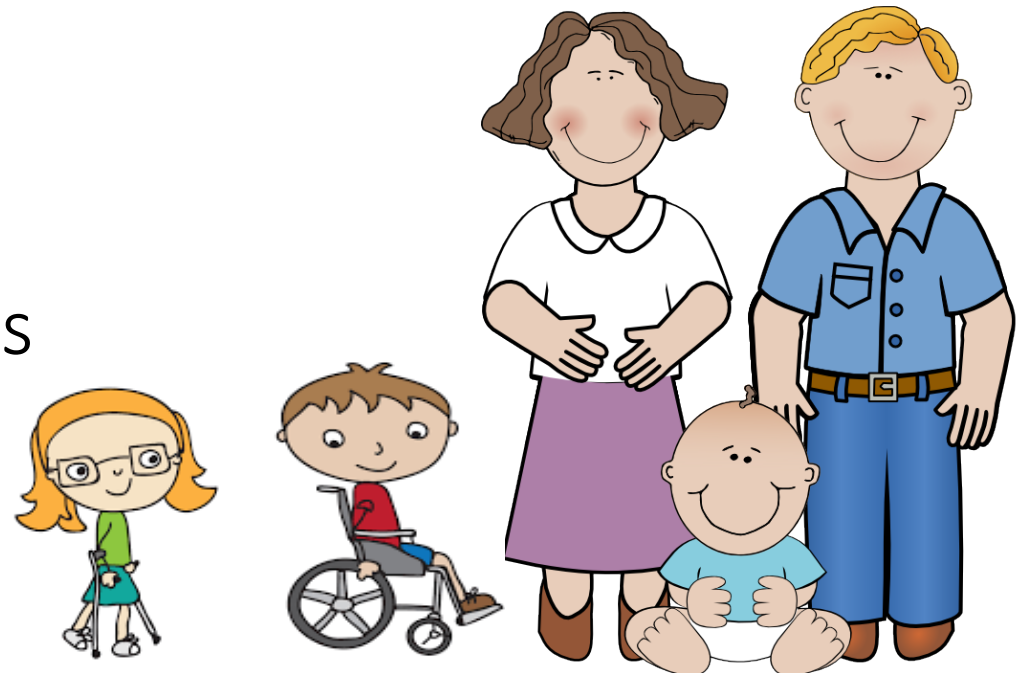
- Back to normal-ish?
- 'Covid-Managed' lines of flow as per trauma?

## 'Other' Clinics

- Be innovative
- Use technology
  - Video clips / photographs
  - Activity trackers ...
- Involve your AHPs



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# Paediatric Orthopaedics

## The Lock Down Challenge

- Life is *not* normal
- We can not do what we want to do ...

## RCS Priority Levels ...

### 'Time Critical' Cases

- Growth
  - Emotional and physical
- Change over time
  - Not always for the worse ...



# Paediatric Orthopaedics

## What about the family unit?

- One 'carer' only in hospital ...
- Siblings/ Support networks...

## 'Time Critical' Pre-operative Planning

- Social isolation?
- Shielding?
- Timing/Meaning of testing?
  - In kids /parents ...



# Paediatric Orthopaedics

## Real Life Priorities

- Is *now* really the right time ?
- Support networks... is this the straw...
- Perioperative care - is it feasible?

## 'Time Critical' Post-operative Period

- No school
- No therapists or orthotists
- No let up for Carer
- Where will the clinics be??



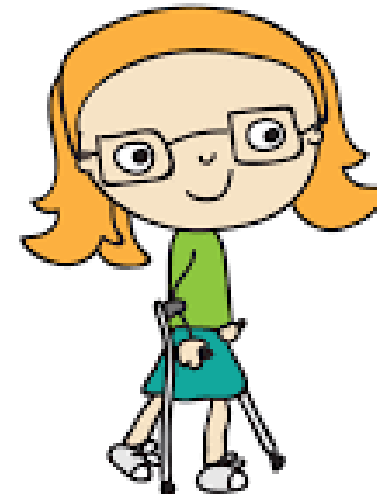
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# Paediatric Orthopaedics

## So, if ...

- Even the straightforward cases are no longer that ...
- How do you deal with those obviously complex ones?
  - Think long and hard ..



# Take Home Message?

## Stay Safe

- Document your MDT thinking, discussion & decision making

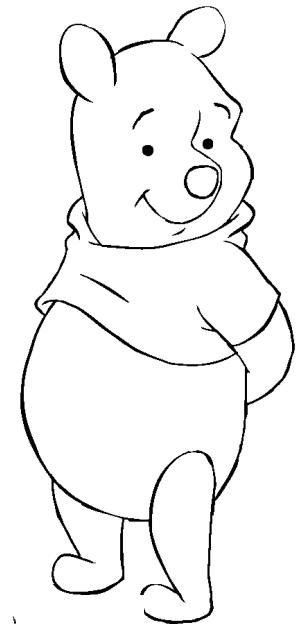
## Take Care

- Of yourself and your patient
- Consent carefully
- Remember Montgomery ..
  - What other treatments are available?



**First do no harm...**

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# The Anaesthetic View

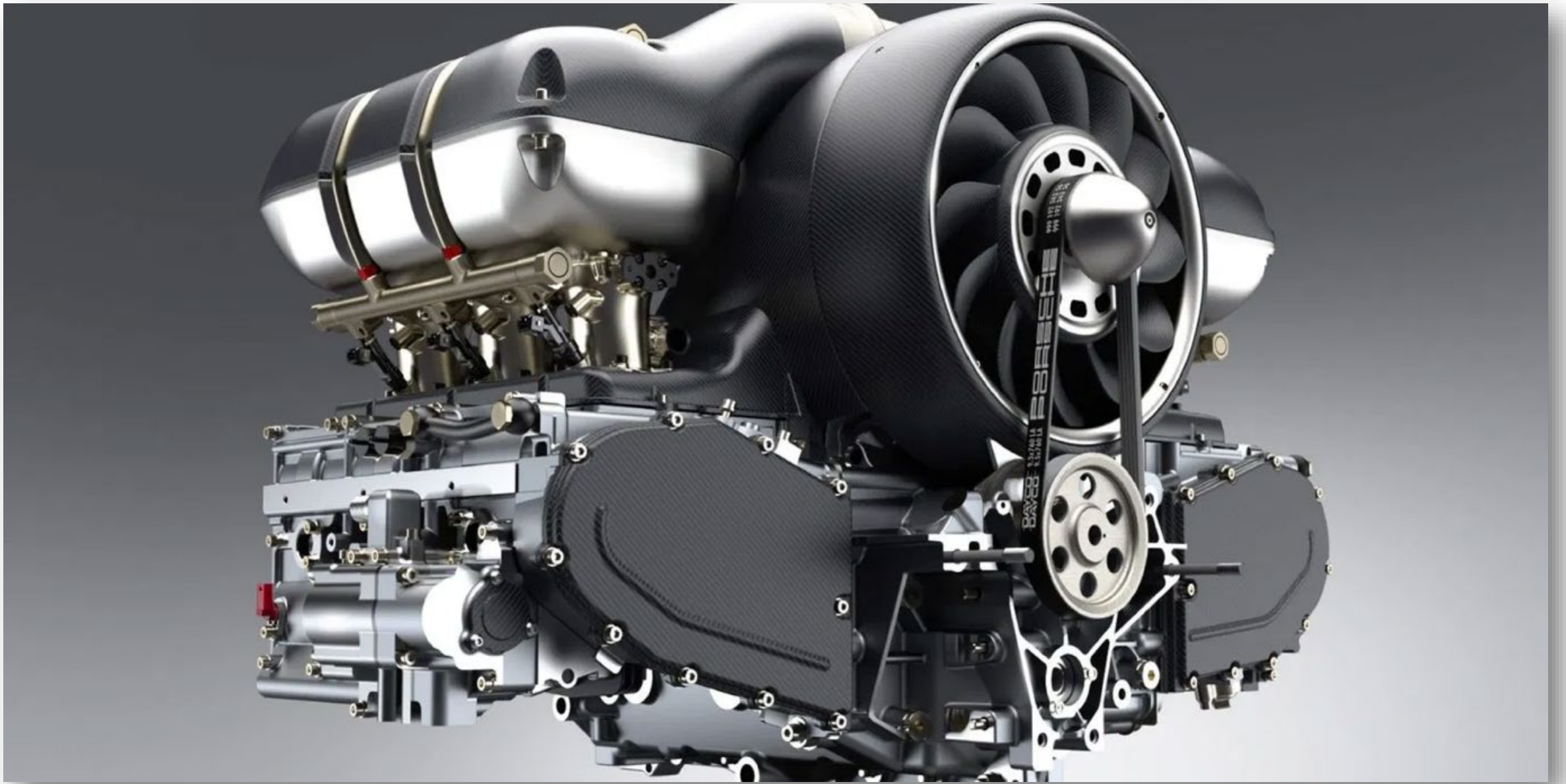
William Harrop-Griffiths

*Professor of Practice (Anaesthesia), Imperial College, London  
Chair, RCoA Clinical Quality & Research Board*

@wharropg



# Restarting planned surgery in the context of the COVID-19 pandemic





# Where have all the S's gone?

- Staff
  - Anaesthetists are intensivists
  - ODPs and theatre staff are ICU nurses
- Stuff
  - Anaesthetic machines are ICU ventilators
  - Syringe pumps delivering sedatives and vasopressors
- Space
  - Theatres and Recovery Rooms are temporary ICUs
- Scrubs

# Before planned surgery restarts

- Staff
  - Repatriated, well and well-rested
- Stuff
  - Our kit back where it belongs
  - Adequate PPE and drugs in reserve and secure supply
- Space
  - Close or move the temporary ICUs

# Another S - Systems

- Development of “green” and “blue” pathways
- Perhaps even green and blue teams
- And green and blue hospitals
- Finding ways of increasing efficiency while maintaining patient and staff safety
  - One list but two theatres

# Anaesthesia

- Step forward regional anaesthesia
  - Not an AGP like GA
  - Induction remote from surgery
  - One anaesthetist to >1 theatre
  - Faster recovery if any
  - Less adverse immune impact

# T&O Recovery

- Will be slower than we would all want
- Anaesthesia may limit progress while ICU capacity stays significantly increased
- Everything will take more time for a while
- Until an effective vaccine is with us

# The End

Keep well!

# Discussion

- You are able to submit questions via the questions pane of the control panel.
- Please keep questions short and to the point.
- If we are not able to answer all questions during the Q&A session, we will reply via email following the webinar.

# Summary



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# The Next Phase

## Recovery of T&O Surgery

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