MOVING TOWARDS A RETURN TO ROUTINE DENTAL CARE

COVID-19

STANDARD OPERATING PROCEDURES FOR DENTAL TEAMS IN SCOTLAND

UNCONTROLLED IF PRINTED

November 2020

A Guide for Dental Teams

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1. Introduction

COVID: Dental Services in event of national resurgence & local outbreaks

The COVID-19 pandemic has led to the closure of dental practices or a reduction of dental services all over the world. The following shows key dates in the management of dental services in Scotland during the pandemic to date.

- **23rd March 2020** all routine dentistry ceased with Urgent Dental Care Centres being set up.
- **20th May 2020** indication of the start of phased remobilisation of NHS dental services.
- **13thth July 2020** dental practices to see NHS patients for routine non-aerosol care.
- **17th August 2020** GDS could provide a limited range of AGPs for registered NHS patients

As Scotland learns to live with coronavirus our aim will be to implement a staged, risk-based approach to the restriction and re-mobilisation of dental services to meet population needs in line with the Scottish Government's tiered approach to the prevailing public health situation. National direction regarding moving between service levels when the virus is in general community circulation will be made by the Scottish Government's Chief Dental Officer in conjunction with Public Health Scotland. Local direction will be from the NHS Board Director of Dentistry who should ensure that the local consultant in dental public health is in regular contact with the public health team should there be a requirement to amend the service level in response to any outbreak.

Service Level	Protection Level (SG COVID Strategic Framework)	NHS24 (OoH)	GDS/PDS/HDS	UDCC
Urgent Service	**Level 4** with national direction and PPE supply severely limited due to acute sector demand	Remote triage +/- refer to UDCC	Remote triage +/- AAA +/- refer to UDCC	Urgent service including AGP for all patients
Priority Service	**Level 4** with national or local direction	Remote triage +/refer to practice/OoH service/UDCC	Priority service including AGP for non-COVID patients	Urgent service including AGP for COVID +ve / COVID risk patients
Routine Service	**Level 4** with no direction **Level 0 - 3**	Remote triage +/- refer to practice/OoH service/UDCC	Routine service including AGP for non-COVID patients	Urgent service including AGP for COVID +ve / COVID risk patients *

* In this phase the UDCC may be replaced by a designated PDS COVID referral pathway
Patient groups covered:
Urgent service - for people with acute dental problems (i.e. SDCEP 'urgent' criteria) and/or concern of suspicious
Priority service - for people with acute or enduring dental symptoms and/or high risk of dental disease

Routine service - for non-COVID registered and unregistered patients. Referral for COVID +ve / COVID risk patients; throughput remains reduced with access to care determined by clinical judgement

Moving Towards Delivering Routine Dental Care

A range of services have been mobilised gradually over the last months to ensure the ongoing delivery of dental care. Although we are still living with the uncertainty of the COVID-19 pandemic, it has been accepted that, the reduced level of dental services over the last months, will have impacted on patient care and oral health. In light of this, the decision has been made that dental services should now be expanded to allow for the full range of NHS dental care from the **1st November 2020**.

It should be noted that this is not business as usual and that complex issues such as physical distancing, fallow time and the use of enhanced PPE will limit the volume of care that may be provided. The details are provided in PCA(D)2020(13) supported by the Revised SDR 148.

The scale of change required to allow dental practices to get to this phase cannot be underestimated. Dental teams have worked extremely hard to fulfil the new requirements. As this new phase develops, further requirement for changes in practice are likely to be identified.

The need and demand for clear, consistent sources of information and advice to support dental teams to apply requirements has been apparent. There has been an overwhelming array of guidance from multiple sources that, in the main, has been helpful. Inevitably, differing expert opinion and lack of evidence still exists and will continue to do so for the foreseeable future.

With the recent publication of the SDCEP AGP Mitigation Review, there has been more clarity in this area. The publication of the National Infection and Prevention Dental Appendix has also been welcomed as it has adopted elements of the SDCEP Review.

These Standard Operating Procedures (SOPs) are intended to support dental teams, as they work towards resuming routine services, while ensuring that all measures to reduce the risk of Covid-19 transmission are in place and applied consistently to support both patient and staff safety.

These SOPs are based on current guidance in an effort to bring some consistency across practices. They include some practical suggestions to enable implementation. Dental teams would, as usual, be expected to follow National guidance and apply such guidance to the circumstance in their individual setting**. There will always be minor local variations**. As long as general principles are followed some minor differences in application can be acceptable.

NB These SOPs are not intended as a prescriptive list. We trust that all team members will be able use their clinical judgment when applying guidance around patient management in what we appreciate is a highly challenging environment. The need to use **a risk assessment** to enable decision-making processes in certain circumstances may be required if evidence is unavailable.

(Any information included to underpin Standard Operating Procedures is in line with current guidance. As we move through this phase this may change. Updates of this document will be required as guidance changes.)

2) COVID-19 Risk Assessment

All aspects of Health and Safety and any potential risks are the responsibility of employers. A risk assessment document is an essential requirement for all aspects of Health and Safety.
It is essential that the practice updates their Health and Safety Risk Assessment to identify the measures required to minimise the risk of COVID -19 transmission. Further information is available in the Health and Safety Executive's Working safely during the coronavirus outbreak – a short guide:

https://www.hse.gov.uk/news/assets/docs/working-safely-guide.pdf

The HSE suggests that risk assessments should follow five simple steps:

1. Identify the hazards.
2. Decide who might be harmed and how.
3. Evaluate the **risks** and decide on precautions.
4. Record your findings and implement them.
5. Review your assessment and update.

SDCEP Practice Support manual – Health and Safety Risk Assessment

https://www.psm.sdcep.org.uk/

Due the introduction of new measures to reduce the risk of transmission of the COVID -19 virus all aspect of dental practice should be considered, recorded, and reviewed and changes introduced.

- A walk-through of the patient journey within the practice will inform your risk assessment
- Identify practical modifications to current facilities and working practices.
- These might include the locations of additional hand hygiene facilities, patient chaperoning, physical (social) distancing measures etc.

See Appendix 1 COVID-19 Risk Assessment Template with worked example.

3) Facilitating Physical (Social) Distancing

Maintaining physical (social) distancing of 2 metres between patients and staff in healthcare settings is essential. Appropriate PPE will be used when this cannot be applied e.g. during dental treatment. If you cannot ensure that a 2-metre distance is maintained in all areas other solutions would need to be considered such as Perspex screens. In addition to this, staff should wear masks in all areas of the practice and patients should always wear a face coverings apart from when treatment is being provided.

https://www.sdcep.org.uk/wp-content/uploads/2020/06/SDCEP-Resuming-General-Dental-Services-Following-COVID-19-Shutdown-Update-120620.pdf

3.1 Physical Distancing in Communal Areas

- Clearly display instructions at the practice entrance to advise patients on arrival for appointments what to do and any arrangements for others to make appointments.
- Patients who wish to make an appointment should do so by phone.
- Patients are always required to wear face coverings apart from during dental treatment.
- Staff require to wear mask in all areas of the practice.
- Clear signage about mask wear and hand hygiene should be posted.
- People making deliveries etc. should contact reception before entering the practice. If the practice has more than one entrance, consider using only one of them for patients.
- Consider staggering appointments for different surgeries to support physical (social) distancing.
- To avoid waiting for treatment in communal areas, ask patients to wait outside the practice if they can (e.g. in their car) until called for their appointment.
- Take patients directly to the surgery to avoid them waiting in the practice.
- If it is necessary to use a waiting area, space out chairs to facilitate two metre physical (social) distancing;
- Place markers (e.g. tape) on the floor to encourage two metre distancing between individuals

3.2 Physical Distancing for Staff:

The need for all staff to maintain physical distancing at all times in the practice is essential. There are settings and situations where this will be challenging. The whole team must consider how this can be facilitated effectively in their own settings.

- Dental team members must apply 2 metre requirements for physical distancing with other staff members when possible. (Exceptions related to providing clinical care when task specific PPE is worn).
- Face masks must be worn in all communal areas of the practice such as kitchens, staff rooms, office areas, meeting rooms etc. Staggered break times and rotas may be required to reduce risk.

For Further Information on wearing mask in practice;
https://www.gov.scot/publications/coronavirus-covid-19-interim-guidance-on-the-extended-use-of-face-masks-in-hospitals-and-care-homes/

4) Staff Health and Well Being

It is important to support the health and wellbeing of everyone who works in the practice, including measures to minimise the risk of COVID-19 transmission. This is in the interest of patient and staff safety of individuals and patients.

- Staff will be supported to ensure they understand the risks associated within their work during the COVID-19 pandemic, and the how to apply measures required to mitigate any risks. Individual meetings will be arranged to discuss their health status and risk of staff and any concerns they have.

- Staff at higher risk if exposed to COVID due to health or are living with persons who would be considered vulnerable may have their duties amended according to their risk assessment https://www.gov.scot/publications/coronavirus-covid-19-guidance-on-individual-risk-assessment-for-the-workplace/

- Meetings including the whole dental team will be essential to operate effectively as the situation changes. If meeting space and time is limited these can be facilitated virtually.

- Staff will have individual training needs, and focused training should be available to ensure they are competent and confident to apply new requirements.

- Staff will be signposted to available NHS support, such as the National Wellbeing Hub, and resources on mental health and wellbeing support from NHS Education for Scotland. https://learn.nes.nhs.scot/27993/coronavirus-covid-19

4.1 Staff COVID-19 status

- Ensure that all practice staff are aware of the symptoms of COVID-19 infection and have downloaded the Protect Scotland App to support the Test and Protect program. https://www.nhsinform.scot/campaigns/test-and-protect

  https://www.nhsinform.scot/illnesses-and-conditions/infections-and-poisoning/coronavirus-covid-19

- Ensure that all practice staff are aware of the steps to take if they, or someone they live with, develops symptoms, including how to apply for a COVID-19 test https://www.nhsinform.scot/self-help-guides/self-help-guide-access-to-testing-for-coronavirus

- If a member of staff, or a member of their household, is tested for COVID-19, they should follow the advice provided with the test result.

- If a member of staff lives with a person who develops symptoms of COVID-19, the staff member should self-isolate for 14 days from the onset of symptoms. If they then develop symptoms, they should stay at home for 7 days, even if it takes them beyond the original 14 day period.

- Staff requested to self-isolate as part of contact tracing should follow the precise instructions provided through the contact tracing.
- If a member of the dental team, or a member of their household, is tested for COVID-19, they should follow the advice provided by the Test and Protect Team.
- All staff should follow Scottish Governments guidance on self-isolation associated with travel, particularly when it changes at short notice. https://www.gov.scot/publications/coronavirus-covid-19-public-health-checks-at-borders/
- Staff should keep their employer fully informed, as a matter of urgency, when if they receive any information about their COVID-19 status.
- The local Test and Protect team will work with your practice and Health Board Teams should any COVID related concerns arise. **Local arrangements may vary**.

NB. National information changes frequently. Always check news and Scottish Government websites for updated guidance.

4.2 Staffing Requirements

During the COVID 19 pandemic staffing needs may vary. The changes in practice related COVID-19 need to be considered carefully. Optimal staffing levels to cover patient care and treatment, escorting patients, triage, administration, cleaning, as well as balancing patient and staff safety will develop over time. If administrative work can be done from home this should be supported.

- A rota should be planned in advance but may change in relation to circumstances. Regular updating may be required.
- Regular team meetings and good communication will be essential to enable the organization to run smoothly. Using video conferencing to support communication will reduce the need for face-to-face meetings.
- If staff numbers allow, consider grouping staff into “working teams” so the same individuals work together to support minimizing interactions between families.
- In large practices it will help to record the dental team members who saw a specific patient.
- Use of the Practice Management System will facilitate patient tracking, remember to ensure you have up-to-date contact details for your patients.
- Ensure that when other contractors require to enter the practice that their COVID-19 status is established, and their attendance recorded.

4.3 Work wear

- All staff are must change into their work wear on arrival at the practice using the changing areas available.
- All non -work wear should be stored in a locker or a bag, not on coat hooks or furniture.

- During lunch, staff should change out of work-wear into their usual clothes before entering a staff room.
- You must bring a separate pillowcase (or scrub bag) to transport work-wear home at the end of each session.
- Work-wear should be laundered daily by placing directly into your washing machine on their own without handling. (All work=wear should be laundered at 60-90 degrees or the highest temperature suitable for the fabric as per the care label.). https://www.sehd.scot.nhs.uk/dl/DL(2018)04.pdf. This advice is appropriate for primary dental care teams where it states 'All uniform should be laundered at the highest temperature suitable for the fabric as per the care label. '

4.4 Staff Training

Additional training is essential to ensure that staff can work safely. The practice will facilitate and record infection prevention and control (IPC) training for all staff.
This will include:

- Current guidance on COVID-19 e.g. physical (social) distancing SDCEP Guidance
- The principles of Standard Infection and Control Precautions and Transmission Based precautions
- Choice, use and donning and doffing of PPE;
- Staff health and wellbeing, which could include training in mental health, resilience, self-care.
- Training in any new IT/software tools, for example screening questions for COVID19 and collecting patient medical histories online.

Sources for Training

- NHS Education for Scotland NES - Virtual Training Sessions (Check NES portal notifications https://portal.scot.nhs.uk/
- NHS Education for Scotland NES Turas Learn COVID-19 resources https://learn.nes.nhs.scot/32898/clinical-effectiveness/quality-improvement-in-practice-training-infection-control-and-decontamination/covid-19-infection-control-and-decontamination-for-the-dental-practice
- Health Protection Scotland https://www.hps.scot.nhs.uk/a-to-z-of-topics/covid-19/

- **Additional in-house training for staff could include:**
  Scenario-based team training that covers the amended local working practices at e.g. physical distancing, roles and responsibilities and changes to CPR guidance https://www.resus.org.uk/covid-19-resources/covid-19-resources-general-public/resuscitation-council-uk-statement-covid-19
- Staff health and wellbeing, which could include training in mental health, resilience, self-care.
- Training in any new IT/software tools, for example screening questions for COVID19 and

collecting patient medical histories online.
- Application of rubber dam

5) Administration of Patient Care Pathways in Dentistry

The IPC National Guidance has categorised patients according to risk. These pathways are specific to the COVID-19 pandemic and are examples of how organisations may separate COVID-19 risks. It is important to note, that these pathways do not necessarily define a service to a particular pathway and should not impact the delivery of care for the patient or individual. Implementation strategies must be underpinned by patient/procedure risk assessment, national and local testing regimens and epidemiological data.

5.1 Care Pathway Definitions

High risk COVID-19	Medium risk COVID-19	Low risk COVID-19
a) untriaged individuals present for assessment or treatment (symptoms unknown) OR b) confirmed SARS-CoV-2 (COVID-19) positive individuals are cared for OR c) symptomatic or suspected COVID-19 individuals including those with a history of contact with a COVID-19 case, who have been triaged/clinically assessed and are waiting test results OR d) symptomatic individuals who decline testing	a) triaged/clinically assessed individuals are asymptomatic and are waiting a SARSCoV-2 (COVID-19) test result with no known recent COVID-19 contact OR b) testing is not required or feasible on asymptomatic individuals and infectious status is unknown OR c) asymptomatic individuals decline testing	a) triaged/clinically assessed individuals with no symptoms or known recent COVID-19 contact who have isolated/shielded AND have a negative SARS-CoV-2 (COVID-19) test within 72 hours of treatment and, for planned admissions, have self-isolated from the test date OR b) Individuals who have recovered from COVID-19 and have had at least 3 consecutive days without fever or respiratory symptoms and a negative COVID-19 test OR c) patients or individuals are regularly tested (remain negative)

Screening and triaging must be undertaken to enable early recognition of COVID-19 cases. Triage should be undertaken by clinical staff who are trained and competent in the application. While we move to full operating capability, remote triaging for COVID19 status will still be required to allow for COVID-19 Risk assessment and to determine clinical requirement in advance as far as possible. The questions below reflect the definitions of the High, Medium and Low categories. Patients who are in the high risk category through triage should not be treated in GDS primary care settings. Currently, and until 'point of care' testing is available, patients requiring routine dental care will predominantly fall into **the medium risk pathway**.

NB Only If a patient has evidence of a recent (72 hours) negative SARs-CoV-2 test and no screening or triaging risks are identified, can the low risk pathway can be followed.

5.2 Screening Patients for COVID-19

It is important to establish each patient's COVID-19 status both before confirming an appointment. If the patient will be accompanied by a parent, carer or comforter, then that person should also be screened. An assessment of the patient care requirements will also be required to enable an appropriate appointment to be arranged.

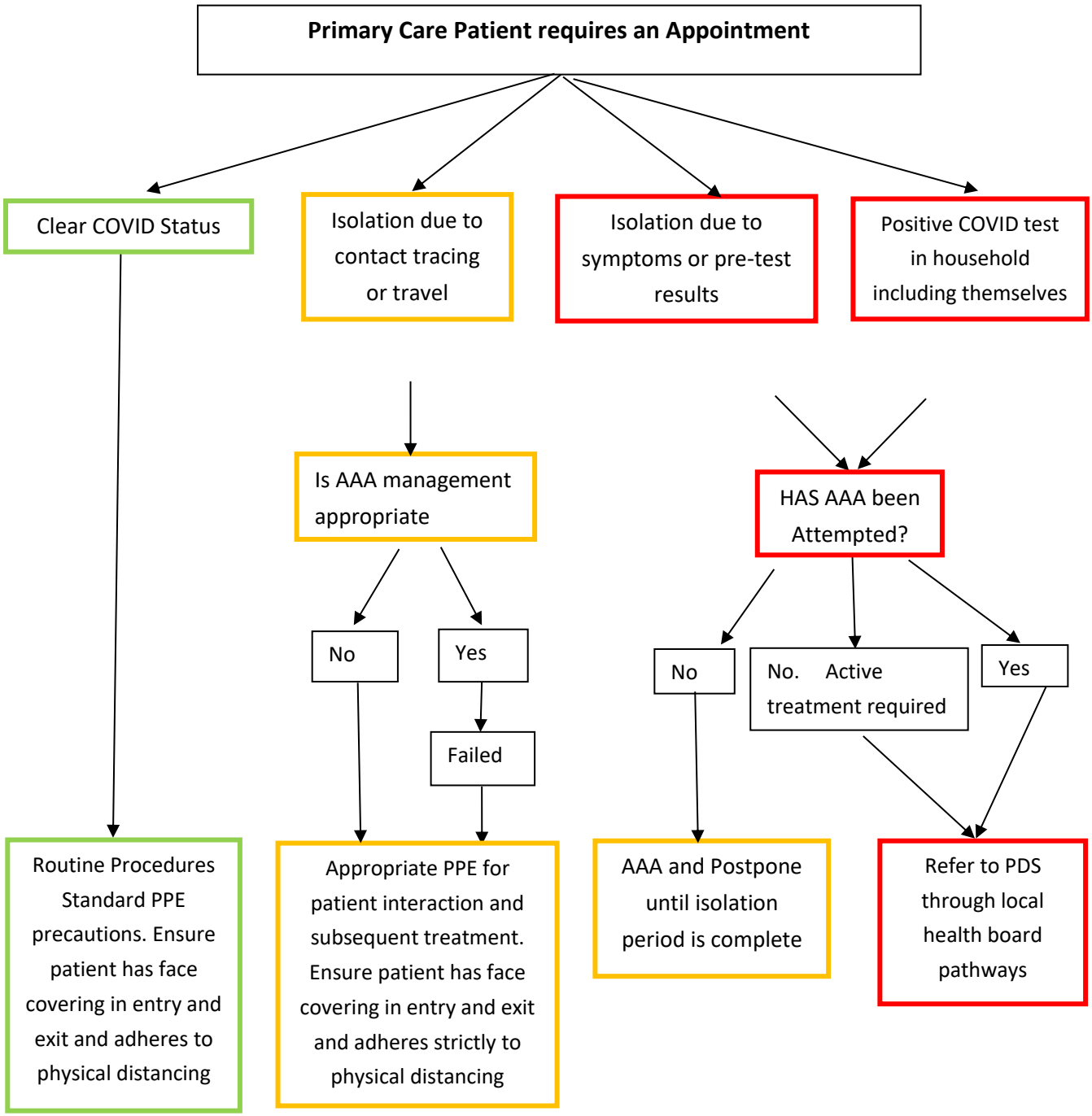
Below are the questions for COVID19 screening currently suggested to align with example of patient pathway previously suggested.

Before scheduling an appointment, assess the patient (and any essential accompanying person) by asking the following questions, and record the response(s):

- Have you tested positive for COVID-19 in the last 10 days?
- Are you waiting for a COVID-19 test or the results?
- Within the last two weeks, do you have:
  - a high temperature or fever;
  - a new, continuous cough*;
  - a loss of, or change in, sense of smell or taste?
- Do you live with someone who has either tested positive for COVID-19 or had symptoms of COVID-19 in the last 14 days?
- Have you been in recent contact (within 14 days) with anyone displaying these symptoms or who has been confirmed positive for COVID-19?
- Have you travelled abroad in the last 2 weeks, to a country which the current government advice requires you to quarantine on your return to the UK?

* A new, continuous cough means coughing for longer than an hour, or three or more coughing episodes in 24 hours. If the patient usually has a cough, it may be worse than usual.

5.3 Flow Chart- Pathways and Appointment in Primary care



Refer to High Medium and Low Definitions in the COVID Pathway Table

5.4 Prioritising Patient Care - Moving Towards the Return of Routine Services

To help dental teams prioritise patient care, the table below may be helpful.

It is based on RCS Eng. Priority Coding widely used as a basic for decision making across the UK. This may help teams bring some structure to working through the inevitable backlog of patients.

Patients could be assigned a 'priority code' and appointed appropriately.

This system may also help with alleviating patient anxieties about how and why their care has been prioritised and support team in difficult conversations related to further delays.

Please note the timeframes are only indicative and will need to be adapted to suit individual practice and patients' circumstances. There are clinical examples as to what may be included in each priority.

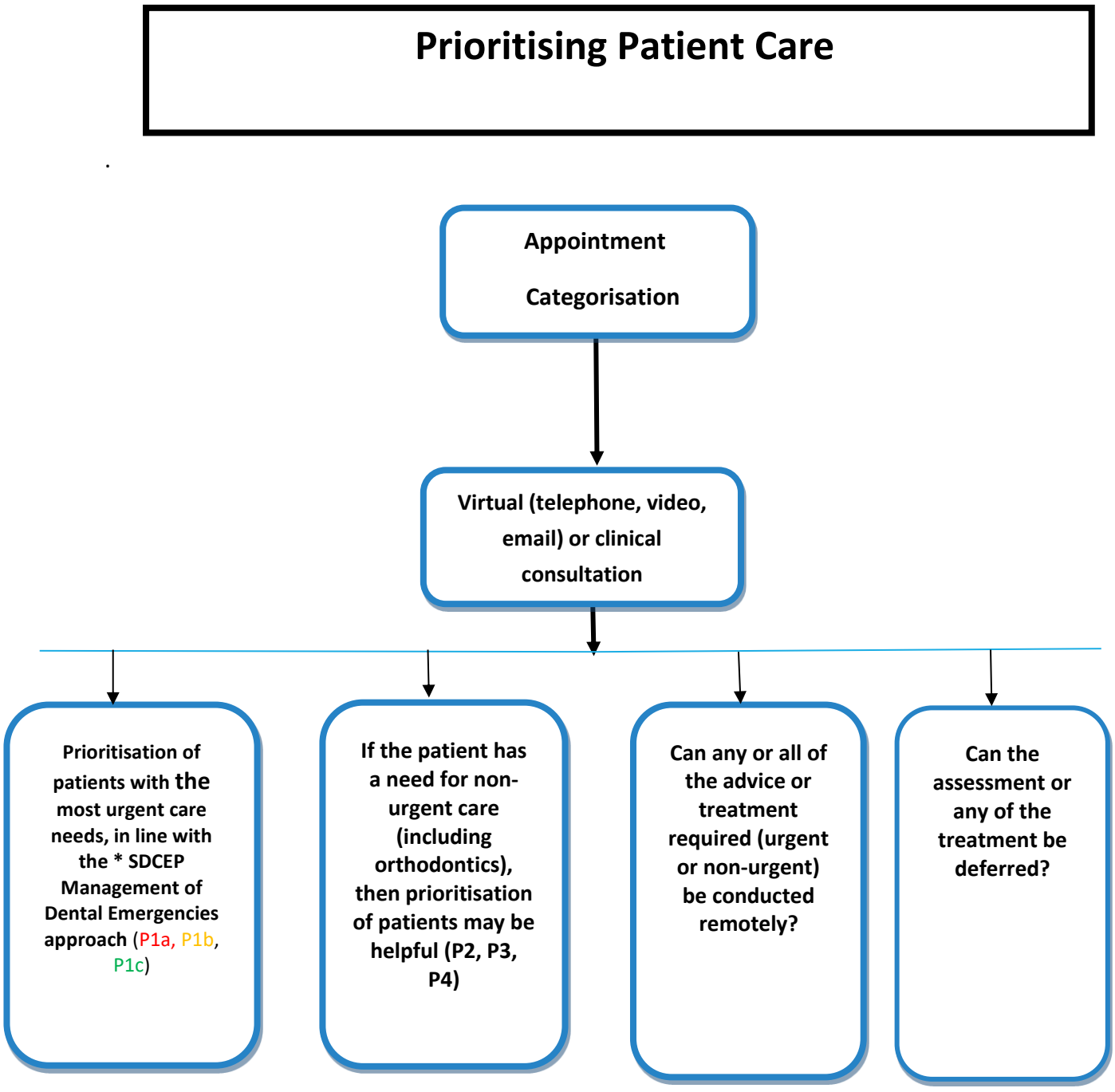
Patient Assessment

GDS priority		
P1a Emergency	Needs seen within 1 hour	as per SDCEP Triage Guide
P1b Urgent	Needs seen within 48 hours	as per SDCEP Triage Guide
P1c Routine	Needs seen within 7 days	as per SDCEP Triage Guide
P2 Patients with treatment plans to complete from previous urgent care	Can be undertaken within 6-8 weeks	Priority
P3 Disease control	Can be undertaken within 2-4 months	Ongoing destructive disease processes (perio and caries)
P4 New treatment plans and maintenance	Can be undertaken > 4 months	Routine

Each patient should be assessed and managed on their own merit, taking into account their best interests, professional judgement and the prioritisation of the most urgent care needs.

This is of particular importance to clinically vulnerable patients at the highest risk from COVID-19. Using this clinical judgement and shared decision making will determine whether care should be provided at all and whether it should be remote or face-to-face.

Flow Chart - Prioritising care



A number of patients will have had their care deferred or disrupted due to the pandemic. They will naturally be concerned and anxious to progress. Good communication with patients will be key to explain why there may be a need to prioritise. These could be difficult conversations. Plan ahead if possible and try to ensure they hear the information accurately. NHS patients should be are aware of

the care available, the constraints of the situation, and that their expectations are realistic. Avoiding complaints is usually based on good communication.

6) Standard Infection Control Precautions (SICPs)

The 10 Standard Infection and Prevention Control Precautions are the basic infection prevention and control measures necessary to reduce the risk of transmission of infectious agents from both recognised and unrecognised sources and are required across all COVID-19 pathways. They should be used by all staff, always, for all patients whether infection is known to be present or not to ensure patient and staff safety. http://www.nipcm.hps.scot.nhs.uk/

6.1 SIPS -Summaries and Links

Hand hygiene:

Good hand hygiene is an essential as part of all infection prevention and control procedures. During Covid-19 this has underpinned the public health message for the public and reinforced the message for health and social care staff. The use of soap and water is essential if hands are contaminated. This link provides a step by step guide to hand hygiene using soap and water http://www.nipcm.hps.scot.nhs.uk/appendices/appendix-1-best-practice-how-to-hand-wash/

The use of >70% alcohol based hand rub can be used before and after caring/treating a patient, entering and leaving the surgery and after removal of PPE. This link provides details of how to use these products effectively

http://www.nipcm.hps.scot.nhs.uk/appendices/appendix-2-best-practice-how-to-hand-rub/

Respiratory & Cough Etiquette

As Covid-19 transmission can occur via droplets, the need to raise awareness of applying good respiratory and cough etiquette in the practice setting is important for patients and staff. Displaying posters, providing tissues, foot operated bins and alcohol hand rub will support the application of this Standard Infection Prevention and Control Precaution This is a link to one of the many posters available

https://www.infectionpreventioncontrol.co.uk/content/uploads/2019/06/Respiratory-and-cough-hygiene-poster.pdf

Safe management of care equipment

This relates to decontamination of re-usable equipment and instruments. Standard operational procedures for cleaning, disinfection and sterilsation of instruments should be applied as usual to follow country specific guidance with reference to manufacturers' instructions

https://www.sdcep.org.uk/decontamination-into-practice-guidance-series/

Safe management of blood or body fluids:

If blood and body fluids are present a disinfectant agent at the required concentration for the solution and for the required contact time should be used in accordance with the manufacturer's instructions. For example use of a chlorine solution in the required concentration e.g. 1% (10000 ppm av cl) for blood.

https://hpspubsrepo.blob.core.windows.net/hps-website/nss/3030/documents/1_nipcm-appendix-9.pdf

Safe Disposal of Waste (including sharps):

Healthcare waste produced in the medium and high-risk pathway should be treated as Healthcare (clinical) waste and treated accordingly. Waste generated in the low risk pathway should be treated/disposed of as routine practice.

Transmission Based Precautions (TBPs)

TBPs are additional measures to SICPs required when caring for patients/individuals with a known or suspected infection such as COVID-19. TBPs are based upon the route of transmission and include:

Contact precautions: used to prevent and control infections spread by direct (hands) or indirect (environment or equipment) contact. COVID-19 can be spread via this route

Droplet Precautions: used to prevent and control infections that spread from the respiratory tract via droplet (>5 micrometres via coughs and sneezing) over short distances 1-2 metres from one individual to another. COVID-19 is predominately spread via this route.

Airborne precautions: used to prevent and control infection when aerosols (less than or equal to 5 micrometres) spread from the respiratory tract of one individual to another. COVID-19 has the potential to be spread via this route when an AGP is undertaken.

7) Safe Management of the Care Environment

Safe management of the care environment is one of the 10 Standard Infection Control Precautions.

Most dental patients at this time are likely to be categorised as being in the medium or high-risk pathway unless they have evidence of the requirements defined in the low-risk pathway. In relation to dental care, if patients are in the low risk category for Covid-19, any potential for blood contamination will determine the need to use detergent and disinfectant.

The frequency of cleaning facilities across all Covid-19 pathways should be increased during the pandemic to at least twice daily. Frequently touched sites/points, in surgeries, waiting and other communal areas should be cleaned between patients using a detergent (in the low risk pathway) and cleaned and disinfected between patients in the medium and high-risk pathways.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/928034/COVID-19_Infection_prevention_and_control_guidance_Dental_appendix.pdf

7.1 Dental Surgery Cleaning: General Requirements

Patients in the Medium and High-risk COVID -19 pathways

- Clear procedures and schedules for cleaning in all areas of the practice should be available
- All staff involved in the cleaning procedures must be competent and follow the prescribed cleaning schedules
- All staff will wear PPE - including disposable gloves, disposable plastic apron, fluid resistant surgical face mask and eye protection.
- All cleaning material and equipment required for surgeries following treatment episodes should be available and ready to use.

These will include:

- Disposable cloths or wipes;
- Reusable items such as mops and buckets which are stored clean and dry.
- Mops should be dedicated to different areas e.g. clinical / communal areas.
- A neutral, general purpose detergent to clean and a disinfectant* or a combined product including detergent and disinfectant*
- Instructions for use of all cleaning products must be followed and the compatibility of the product with the material to be cleaned should be checked .
- Disinfectants*

  Solution of chlorine at 0.1% or 1000ppm available chlorine can be made up in advance);

  or

  Viricidal/bactericidal/fungicidal to EN standard 14476 for viricidal activity can be used.

7.2 Cleaning the Surgery following an Aerosol Generating Procedure:

(The general requirements are as per the previous section)

- If an AGP has been undertaken in the surgery, cleaning can't be commenced until any fallow time required has been achieved
- The operator will require to wear PPE – disposable gloves, fluid resistant surgical mask (type IIR), disposable apron and eye protection.
- Disinfectant products will be required.
- On entry to the room, leave window open or mechanical ventilation on to improve air flow
- All elements of the dental unit should be cleaned and disinfected (Dental chair, bracket table, spittoon, light, handles etc.)
- Ensure compatibly of all items/equipment with the disinfectant products used.
- Any coverings applied to keyboards etc must be removed, disposed of and the item cleaned.

- All work surfaces and touch points, including door handles should be cleaned and disinfected.
- The floor should be cleaned at the end of each session (Twice daily).
- Reusable mops and buckets should be cleaned and stored dry.

7.3 Safe Management of Communal Areas

Reducing opportunities as far as possible for surfaces to be contaminated through touch is essential.

Example of measures to achieve this include:

- Patient entry and exit controlled by staff.
- Patients escorted through the practice.
- Areas completely decluttered - remove toys, magazines, leaflets.
- Clear signage to help direct patients comply with arrangements for;
  - Physical distancing and seating arrangements;
  - Use of hand sanitiser;
  - Cough etiquette, tissues and bins;
  - Toilet arrangements.
- Reducing need for paperwork to be shared
- Automated payments
- Items such as card machines, clinipads covered and covering changed after each use ~~in~~
- Any surfaces where contact cannot be avoided must be cleaned and disinfected e.g. Cleaning door handles, chairs and reception desk should be ongoing throughout the day.
- Twice daily floor cleaning.

8) Personal Protective Equipment

Personal Protective Equipment (PPE) required for low, medium and high-risk pathways including the use of airborne precautions when undertaking an AGP is summarised in this table. PPE/Respiratory Protective Equipment (RPE) (if AGP) **must be worn** to protect all members of the dental team undertaking/assisting with the procedure.

Table 1: PPE and RPE for COVID-19 in dental care settings

Patient pathway	High risk Airborne precautions	Medium risk Droplet/Contact precautions unless an AGP	Low risk[1] SICPs
Waiting room/reception **No clinical treatment**	Hand hygiene FRSM [2]	Hand hygiene FRSM	Hand hygiene FRSM
Dental surgery **Non- AGP**	Hand hygiene Disposable gloves (not vinyl) Disposable plastic apron FRSM Eye/Face protection[3]	Hand hygiene Disposable gloves (not vinyl) Disposable plastic Apron FRSM Eye/Face protection	Hand hygiene Disposable gloves (not vinyl) Disposable plastic Apron FRSM Eye/Face protection
Dental surgery **AGP**	Hand hygiene Disposable gloves (not vinyl) Disposable gown FFP3[4] or hood Eye/Face protection	Hand hygiene Disposable gloves (not vinyl) Disposable gown Reusable if sessional[5] FFP3 or hood Eye/ Face protection	Hand hygiene Disposable gloves (not vinyl) Disposable plastic apron FRSM Eye/Face protection

1Airborne precautions are NOT required for AGPs on patients/individuals in the low risk COVID-19 pathway, providing the patient has no other infectious agent transmitted via the droplet or airborne route.

2 FRSM is a fluid-resistant (type IIR) surgical mask.

3 Eye/Face protection (visors) ideally should be disposable. Re-usable eye and face (visors) protection (such as polycarbonate safety glasses/goggles/visors) is acceptable if decontaminated between single or single sessional use, according to the manufacturer's instructions or local infection control policy. Regular prescription glasses are not considered adequate eye protection. Eye/face protection should be removed outside the surgery if worn with a respirator as part of airborne precautions, otherwise this can be removed in the surgery.

4 Reusable respirators can be utilised by practices where the practice, as the employer, holds the evidence that the respirator complies with HSE (Health & Safety Executive) recommendations, that the relevant staff members have been fitted to that mask according to manufacturers' guidance. Reusable respirators are decontaminated, and filters replaced according to the manufacturer's instructions. Sessional use of respirators is recommended if the dental team is undertaking multiple AGPs

5 Reusable respirators can be utilised by practices where the practice, as the employer, holds the evidence that the respirator complies with HSE (Health & Safety Executive) recommendations, that the relevant staff members have been fitted to that mask according to manufacturers' guidance. Reusable respirators are decontaminated, and filters replaced according to the manufacturer's instructions. Sessional use of respirators is recommended if the dental team is undertaking multiple AGPs. FFP3s with valves should be shielded with full face visor.

8.1 Use of Personal Protective Equipment (PPE)

Reception duties / Non-clinical

- Hand hygiene to be performed regularly with >70% alcohol hand rub available and easily accessed and used by staff
- Staff to wear a fluid resistant surgical mask (Type IIR). Masks can be used sessionally.

Non-Aerosol Generating Procedures (All care pathways)

- All PPE required for each member of the clinical team will be available in, or close to, the point of use.
- Hand hygiene performed by clinical team (section on SICPs)
- **PPE required for treatment with no defined need for airborne precautions**
  - Disposable plastic apron
  - Fluid resistant surgical mask (Type IIR)
  - Eye/face protection - Visor or Goggles (These items could be reusable)
  - Disposable Gloves (not vinyl)
- All PPE must be donned following the order of the previous list.

  Donning and doffing videos for PPE for non AGPs can be viewed here: https://learn.nes.nhs.scot/32898/clinical-effectiveness/quality-improvement-in-practice-training-infection-control-and-decontamination/covid-19-infection-control-and-decontamination-for-the-dental-practice
- These items must be worn by all operators during the whole procedure.
- If gloves become damaged or heavily soiled and require to be changed, careful doffing of gloves and disposal procedures must be used, followed by hand hygiene before replacing gloves during a treatment episode. This is essential to avoid contamination of self and other items of PPE
- At the end of the treatment episode, PPE doffing and disposal procedures must be followed.
- **PPE should be removed in an order to minimise the risk of cross-contamination:**

  Glove removal touching cuff only. Dispose of and perform hand hygiene with alcohol hand rub
  Remove apron by breaking ties at neck and waist
  Rolling from top down to avoid contact with heaviest contamination and dispose in foot pedal operated waste bin
  Remove eye protection from the headband or earpieces for cleaning or disposal

Remove fluid resistant surgical mask (Type IIR) by breaking ties and not touching the face section
Perform hand hygiene

8.2 PPE -Aerosol Generating Procedures (High & Medium Risk Pathways)

- All PPE required for each member of the clinical team will be available in, or close to, the point of use.
- Hand hygiene performed by clinical team (section on SICPs)
- The PPE required for Airborne Transmission Precautions includes:
  - Full coverage disposable gown
  - Disposable FFP3 or re-useable respirator*
  - Eye/face protection - Visor
  - Disposable gloves. (Double gloving is not recommended)
- All PPE must be donned following the order of the previous list.
- **Donning and doffing videos for PPE for AGPs can be viewed here:** https://learn.nes.nhs.scot/32898/clinical-effectiveness/quality-improvement-in-practice-training-infection-control-and-decontamination/covid-19-infection-control-and-decontamination-for-the-dental-practice
- These items must be worn by all operators during the whole procedure
- If gloves become damaged or heavily soiled and require to be changed, careful doffing of gloves and disposal procedures must be used, followed by hand hygiene before replacing gloves during a treatment episode. This is essential to avoid contamination of self and other items of PPE.
- At the end of the treatment episode, PPE doffing and disposal procedures must be followed.
- PPE should be removed in an order to minimise the risk of cross-contamination:
  - Glove removal touching cuff only. Dispose of and perform hand hygiene with alcohol hand rub
  - Remove apron by breaking ties at neck and waist
  - Unfasten gown, from the ties and remove touching inside only to avoid contact with heaviest contamination. Dispose in foot pedal operated waste bin
  - Remove eye protection from the headband or earpieces for cleaning or disposal
  - Remove respirator mask (outside the AGP surgery in a designated area)
  - Perform hand hygiene

8.3 Respiratory Protective Equipment (RPE)

All dental team members providing dental treatment which involves procedures that create aerosols must wear respirators to ensure they are protected against respiratory borne pathogens for all patients in the High and Medium risk Covid-19 pathways.

There are a wide and varied range of makes and models of RPE available

https://www.hse.gov.uk/respiratory-protective-equipment/

https://hpspubsrepo.blob.core.windows.net/hps-website/nss/1722/documents/1_tbp-lr-rpe-v3.1.pdf

- RPE fit testing should be conducted by a competent person
- A fit test should be carried out before people wear RPE for the first time. Certification should be provided (fit testing - what to expect [https://www.youtube.com/watch?v=PthSES4O9d8]
- A fit test should be repeated whenever there is a change to the RPE type, size, model or material or whenever there is a change to the circumstances of the wearer that could alter the fit of the RPE.
- Precise instructions for donning RPE must be adhered to and **checked before every use**. Ask a colleague to help ensure this is fitting as tightly as required. HSE RPE fit check tips [https://www.youtube.com/watch?v=iVVlTBcN5eA&feature=youtu.be]

All Respirators should:

- be well fitting, covering both nose and mouth
- always worn when undertaking an AGP on a COVID-19 confirmed or suspected patient/individual
- not be allowed to dangle around the neck of the wearer after or between each use
- not be touched once put on
- be removed outside the surgery
- be single use or single session use (disposable or reusable) and fluid-resistant
- should be compatible with other facial protection used (protective eyewear) so that this does not interfere with the seal of the respiratory protection
- should be discarded and replaced and NOT be subject to continued use if the facial seal is compromised, it is uncomfortable, or it is difficult to breathe through

Other points to consider

- Valved respirators are not fully fluid-resistant unless they are also ‘shrouded’. i.e. covering to protect from splatter or expired aerosols.
- Valved non-shrouded FFP3 respirators should be worn with a full-face shield if blood or body fluid splashing is anticipated.
- Where fit testing fails, suitable alternative equipment must be provided, or the healthcare worker should be moved to an area where FFP3 respirators are not required.

- HPS recommend that FFP3 respirators which comply with BS EN149 are the preferred option for use in UK healthcare.

https://hpspubsrepo.blob.core.windows.net/hps-website/nss/1722/documents/1_tbp-lr-rpe-v3.1.pdf

Re-useable Respirators

Use of disposable FFP3 respirators is the preferred option to lower risk of contamination. There is an acceptance in the UK there are situations where the use of disposable masks might not be possible. HSE have indicated the use of re-usable half mask respirators can be acceptable if clear protocols are in place. In some cases, they may be advantageous because of enhanced fit and comfort. As with any re-usable PPE there will need to be a validated decontamination protocol supported by a routine examination for any signs of damage.
This should be supported and provided by the supplier or manufacturer.

- Reusable respirators can be utilised by individuals if they comply with HSE recommendations.
- Health Boards may require evidence of compliance and certification of face fitting if these will be used for NHS care.

Before reusable RPE is purchased, the following need to be considered;

- They must have a genuine CE mark.
- A visor or shrouding will be required if direction of expired air could be a risk to patients.
- These masks should not be shared by other team members
- Manufacturers' instructions must be are available and clear (this is a legal requirement).

These instructions should include:

  - Donning and doffing instruction
  - Clear decontamination instructions
  - Instruction on how and when to change filters and disposal
  - Suitable storage

N.B. Following the use of Re-usable Respirators the equipment must be cleaned effectively. If stored in a dirty state, micro-organisms have the chance to grow on the equipment surface including filters. If stored in moist warm conditions this would be an exposure hazard the next time the equipment is handled or used

Cleaning protocol

- Remove mask in designated doffing area
- Using the doffing procedures avoid touching the front surface

- Clean hands, don gloves and a disposable apron
- Use the decontamination and storage protocols the manufactures' advice immediately.
- Ensure the mask is dry before storage
- Routinely examine the respirator for any sign of damage

If the manufacturers' decontamination instructions are not clear or explicit this could be considered;

- wipe with disposable cloths/paper roll and a fresh solution of detergent, rinse, dry, and
- follow with disinfectant solution of 1,000 parts per million available chlorine (ppm av cl or a combined detergent/chlorine releasing solution with a concentration of 1,000 ppm av cl)
- then rinse and thoroughly dry

If further information is required related to re-useable respirators, contacting the supplier or the Manufacturer would be advised. If they are unable to help, the Health and Safety Executive are the regulators for these products. https://www.hse.gov.uk/pubns/books/hsg53.htm

9) Aerosol Generating Procedures (AGP)

AGPs are procedures that create a higher risk of respiratory infection transmission and are defined as any medical, dental or patient care procedure that can result in the release of airborne particles <5 µm (micrometres) in size (aerosols) from the respiratory tract of an infected individual. These can remain suspended in the air, may travel over a distance and may cause infection if they are inhaled when treating someone who is suffering from an infectious agent transmitted wholly or partly by the airborne or droplet route.

Table 9.1 indicates examples of instruments and procedures used to provide dental treatment and their potential to produce aerosol particles. It also indicates the precautions to be taken and mitigation which can be applied.

Table 9.1 SDCEP AGP Review Categorisation of Aerosol Generating Procedure			
	Group A	**Group B[#]**	**Group C**
	Dental procedures that will produce aerosol particles <5 µm	Dental procedures that may produce aerosol particles <5 µm, with the amount depending on instrument use	Dental procedures that may produce splatter but are unlikely to produce aerosol particles <5 µm
Definition	Procedures that use powered, high velocity instruments that emit or require water or irrigants for cooling	Procedures that use powered, low velocity instruments	Procedures that do not use powered instruments
Precautions	• Airborne transmission-based precautions • Procedural mitigation • Fallow time	• Standard infection prevention and control precautions as routinely used in dentistry • Procedural mitigation	• Standard infection prevention and control precautions as routinely used in dentistry
PPE required*	• Single use disposable gloves • Single use gown • FFP3 respirator or hood • Single use or reusable eye/face protection (visor)	• Single use disposable gloves • Single use apron (gown required if risk of spraying/splashing) • FRSM Type IIR mask • Single use or reusable eye/face protection (visor)	• Single use disposable gloves • Single use apron (gown required if risk of spraying/splashing) • FRSM Type IIR mask • Single use or reusable eye/face protection (visor)
Examples of instruments / procedures	• Ultrasonic scaler (including piezo) • High speed air/electric rotor (i.e. >60,000 rpm) • Piezo surgical handpiece • Air polishers	• 3-in-1 syringe (air and water together[†]) • 3-in-1 syringe (air-only/ water-only) • Slow speed/electric handpiece (i.e. <60,000 rpm) • Prophylaxis with pumice (using slow-speed handpiece/prophy cup) • Diathermy • Denture/ortho adjusting using slow-speed handpiece • Surgical implant procedure • Surgical handpiece	• Extraction (using forceps/elevator) • Hand scaling • Inhalation sedation • Impressions • Intraoral radiographs • Local anaesthetic administration • Dental examination without 3-in-1 syringe • Re-cement crown

[†]3-in-1 syringe (air and water together) is placed here in Group B, but if used for extended periods or with any other Group A procedure, Group A precautions apply.

[#]For some procedures or instruments categorised in Group B, a further risk assessment of exactly how the instrument will be used is required to determine whether to follow the precautions recommended for Group A procedures.

Please note this table is based on the categorisation in the SDCEP Rapid Review of Aerosol Generating Procedures in Dentistry. The Dental Annex of the National IPC guidance does not include this detail, instead including a short list of procedures considered a high risk of creating aerosols. Consequently, the SDCEP table has been adapted here to align with the National IPC guidance. The categorisation of 3-in-1 syringe use within aerosol generating procedures is widely debate. While in the SDCEP review 3-in-1 syringe with combined air and water was categorised as Group A, it was noted that when used very briefly the amount of aerosol produced may be considerably less than that produced by other Group A procedures and if only used very briefly the precautions for Group B procedures can be followed. The National IPC guidance notes that there is currently no consensus or evidence to include the use of a 3-in-1 as an AGP. Consequently, 3-in-1 syringe (air and water together) is placed here in Group B, but if used for extended periods or with any other Group A procedure, Group A precautions apply.

The footnote explains the conditions related to the application of the information.

9.2 Surgery Selection and Preparation for AGPs

- Room has ventilation - natural or mechanical.
- Air Change per Hour (ACH) known or estimated to enable fallow time calculation.
- Ensure all equipment is switched on and functioning e.g. compressor, suction.
- Ensure window is open or ventilation system activated.
- Ensure high volume suction is operating to the full capacity (Air intake of more than 250 l/min)
- No clutter or unnecessary item on surfaces or displayed - only items necessary for the procedure to be in the room.
- After reviewing triage or consultation notes, the clinical team agree what equipment, instruments and materials are required, with consideration of all reasonable eventualities.
- Drawers and cupboards should not be opened once the AGP has commenced.
- Check New coverings on Keyboards/phones in place.
- PPE for air borne precautions set out for the specific clinical team - correct FFP3 respirators, visors, surgical gowns, disposable gloves. (In surgery or donning area).
- Clinical waste bin and alcohol hand rub available outside surgery entrance.
- 'No Entry – 'AGP in Progress' sign displayed outside surgery door

Radiograph exposure

- If a radiograph is required as part of an AGP procedure, when doors should remain closed, some surgeries, depending on the controlled area and positioning of control panels, may need to consider options for this process.
- The Radiation Protection Supervisor for the practice should review the radiation risk assessment and local rules to take account of any procedural changes necessary for the safe use of radiographs during an AGP.
  https://www.fgdp.org.uk/publication/guidance-notes-dental-practitioners-safe-use-x-ray-equipment

9.3 AGP Procedures During Treatment

- Dentist should confirm patient identity and make sure patient is aware of procedure that is going to be carried out.
- Windows should be open, or ventilation switched on.
- The team should be wearing PPE before the patient is shown into the treatment room wearing face covering.
- Start AGP, using high-volume suction when generating aerosols and use of rubber dam during the AGP.
- Note start and finish time of the AGP.
- A system should to be in place to contact staff outside the surgery in case of emergency.
- If there is an unexpected event and an essential item or instrument is required and not available in the room, another member of the team wearing standard PPE should deliver. Minimal door opening should be used to allow this to take place.
- Should radiographs be required during an AGP, ensure a safe distance outside the direction of the beam considering the designated controlled area and control panel as per RPS and Local Rules allow and how this might be accommodated.

9.4 Post Treatment Procedures

- Patient advice given, remove their PPE, reapply their face covering and leave surgery to be met at the door and shown out by a support nurse.
- Support nurse will direct patient to gather belongings and will escort them to either reception or exit door.
- Digital radiographs should be saved before leaving the surgery.

- After patient exits and room ready to be vacated, the clinical team will remove all PPE, apart from FFP3 respirators, and dispose of in clinical waste bin.
- Leave window open/ventilation system on, closing door behind and remove respirator following effective doffing procedure. Dispose immediately into clinical waste bin and undertake hand hygiene.
- Reusable respirators must be removed after leaving the room following effective doffing instructions and taken to the specified area for cleaning and disinfection as per manufacturers' instructions.
- Undertake hand hygiene.
- The sign outside the surgery door should be modified to indicate when fallow time ends, and cleaning can commence – no-one should enter the room until this time.

10) Ventilation, Fallow Time and Mitigating Factors

10.1 Ventilation – General Requirements

Ventilation is important in any facility as it provides a means of bringing fresh air into a space to remove contaminants and permit a healthy working environment. Ventilation can be provided by natural or mechanical means. Openable windows are the basic form of natural ventilation.

The legal requirement to provide ventilation is contained within the Workplace (Health, Safety and Welfare) Regulations 1992. UK building regulations recommend whole building ventilation to be 10 l/s/person and current healthcare guidance for new buildings and major refurbishments specifies that a treatment room should have at least 10 Air Changes per Hour (ACH). This is also stipulated for a dental treatment room in Scottish Health Planning Note 36 (Part 2 NHS Dental Services in Scotland).

Mechanical ventilation is normally via ductwork and ceiling grilles. Some surgeries may have wall/window mounted fans.

With respect specifically to COVID-19, the current assumed primary routes of transmission are direct exposure to respiratory droplets, and indirect exposure through contact with contaminated surfaces. Inhalation of smaller aerosol particles is also possible, particularly during or following an aerosol generating procedure (AGP).

Ventilation is important to reduce this risk in dental settings. **It is also complex.**

There are different options for types of ventilation systems.

- Surgeries where AGPs will be undertaken need to have ventilation related window opening or a mechanical system
- Natural ventilation is extremely difficult to calculate reliably

- Undertake a review of the current ventilation systems throughout the dental practice
- For surgeries that have no mechanical or natural ventilation AGPs should not be undertaken
- A plan should be in place to upgrade the ventilation for compliance with legislation and guidance
- For surgeries that have access to natural ventilation only and no immediate access to room data on air exchanges per hour (ACH) a risk assessment should be carried out to assess suitability of area for carrying out AGPs
- Surgeries with mechanical ventilation should have information as to the air changes per hour (ACH) the system provided

10.2 Fallow Time Following AGPs

Dispersion of aerosols created during dental procedures, that have not been removed by suction, is primarily achieved by dilution through air changes. Fallow time, in this context, is the period after a AGP to allow for aerosol dilution and reduce risk of re-entering the room. Consequently, the effectiveness of ventilation is the main determinant of fallow time. In any workspace with natural ventilation, air changes will be affected by atmospheric conditions and in all dental surgeries, layout and working practices are likely to lead to periodic variations in- ventilation. Procedural mitigations through the use of high volume suction and the application of rubber dam have been proposed as patient-level interventions to reduce the potential risk of COVID-19 transmission from dental aerosols.

A multidisciplinary working group (SDCEP) have proposed a pragmatic algorithm (with mitigation factors) for post AGP fallow time that has been accepted by the 4 UK CDOs.

Table 1 Fallow time based on ventilation and procedural mitigation. TABLE based on Figure 5a of SDCEP *Mitigation of Aerosol Generating Procedures in Dentistry – A Rapid Review*. https://www.sdcep.org.uk/published-guidance/covid-19-practice-recovery/rapid-review-of-agps/

	AGP length	No Ventilation	1-2 ACH Or Ventilation with ACH Unknown	3-5 ACH	6-9 ACH	≥10 ACH
No High Volume Suction or Rubber Dam	≥5 min	No Group A procedure	No Group A procedure or 60 min*	30 min	20 min	15 min
	<5 min	No Group A procedure	No group A procedure or 60 min*	25 min	15 min	10 min
High Volume Suction only	≥5 min	No Group A procedure	25 min	25 min	15 min	10 min
	<5 min	No Group A procedure	20 min	20 min	10 min	10 min

High Volume Suction + Rubber Dam	≥5 min	No Group A procedure	20 min	20 min	10 min	10 min
	<5 min	No Group A procedure	15 min	15 min	10 min	10 min

NB Group A Procedures. This categorisation is used in the SDCEP *Mitigation of Aerosol Generating Procedures in Dentistry – A Rapid Review*. Refer To the Table I in Section 9 on AGPs for details of the procedures included

10.3 Fallow Time Procedures

Patients on Medium/High Risk pathway

- a minimum fallow time of 10 minutes should apply to allow larger droplets to settle before environmental cleaning.
- AGPs when undertaken on a suspected or confirmed infectious patient should not be conducted in a room that has no natural (i.e. a window) or mechanical ventilation.
- a maximum fallow time of 30 minutes and a minimum fallow time of 10 minutes across the pathways (the time required to allow larger droplets to settle before environmental cleaning)
- any ventilation equipment is maintained according to manufacturer's instructions and is operating effectively.
- Fallow time can commence at the end of aerosol production. However, as this can be unpredictable, some practitioners might choose to add the discrete fallow time to the end of the appointment to facilitate scheduling.
- Scheduling appointments that are likely to involve aerosol production at the end of a session might also reduce the impact of fallow time on capacity.

The following ACH have been agreed as pragmatic:

- unknown or 1 to 5 ACH, a baseline fallow time of 30 minutes is recommended.
- 6 to 9 ACH, a baseline fallow time of 20 minutes is recommended.
- 10 or more ACH, a baseline fallow time of 15 minutes is recommended.

10.4 Procedural Mitigating Factors to Reduce Fallow Time

There are various interventions within dentistry, such as high-volume suction and rubber dam, that have an important role in reducing the volume of bioaerosol generated during dental procedures and/or reducing the level of viral contamination in the bioaerosol.

- Whenever possible, high volume suction should be used for dental procedures which will produce splatter, droplets or aerosol. High volume suction may not be suitable for certain dental procedures (e.g. biopsy) and some patients (e.g. those with a strong gag reflex)
- To provide high volume suction the air flow rate for a dental vacuum system should have an air intake of more than 250 l/min at the widest bore

- The performance of the suction can be checked by an engineer. (Devices to measure this are available to purchase.)
- High volume dental suction units must be well maintained according to manufacturers' instructions
- High volume suction should be used with a tip of at least 8 mm in diameter attached to an evacuation system
- Dental nurse support is necessary to ensure the correct use of high volume suction
- Ensure the suction tip is positioned correctly throughout the procedure
- Use of effectively working high volume suction could contribute to a reduction in fallow time following an AGP

Rubber Dam

- Rubber dam is used during restorative dentistry to isolate the treatment zone from saliva and to protect the patient's airway
- Use of rubber dam may contribute to a reduction in fallow time following an AGP
- Rubber dam should be used for restorative dental procedures which produce splatter, droplets or aerosol
  - It is not suitable for certain dental procedures (e.g. restorations at gingival margin, periodontal treatment. Some patients may not be able to tolerate)
- Careful removal of rubber dam is important to minimise the risk of contamination from patient saliva/secretions on the reverse side
- It might be necessary to explain to patients why rubber dam is now being used
- Use of rubber dam which is latex-free is preferable
- Correct use of rubber dam may require additional training and regular practice

10.5 Additional Environmental Mitigation Measures to consideration

Fans:

- Fans can create turbulence that dilutes the most concentrated aerosols
- If used, they should be positioned to move air towards windows and mechanical extract points
- Fans should not be directed towards doors
- Fans should be cleaned regularly to remove visible soiling and not used in the high-risk pathway
- Planned preventative maintenance and cleaning of fans and their blades should continue

Air Conditioning Units

- Fixed air conditioning units (for example, wall or ceiling mounted recirculating air coolers - split units) and portable air conditioning, **which do not recirculate** to other rooms, can be used

- Where there is poor air circulation within a room, it may be beneficial to mix air so as to dilute aerosols. These types of air conditioning will cool staff wearing water repellent PPE
- Portable air conditioning should not be directed towards doors, driving air into other rooms, nor should any pipework or cables impede fire doors
- Portable air conditioning should be used cognisant of any risk of legionella (HTM 04 - 01) and risk from bacteria in condensate water when emptying the reservoir
- Daily emptying of the reservoir should be recorded
- Planned maintenance should be carried out on the device following manufacturers' guidance and should be recorded
- Do not use portable air conditioning that incorporates humidifiers

Filtration Systems:

- The removal or inactivation of biological agents will vary according to filtration or microbicidal efficacy, and over time filters will become progressively blocked
- Microbicidal treatment such as UV can also become obscured by a build-up of dust and the spectrum of UV emission, critical for microbicidal efficacy
- There is significant debate on the efficacy of 'air scrubbers'. The suggested ACH they provide may not be accurate
- If used, maintenance of this equipment is vital

Fumigation and Fogging:

- Due to the health risks from exposure to the chemicals used, fumigation and fogging with disinfection chemicals are **unsuitable** for occupied rooms
- As they also require a period of time for clearing, they are unlikely to be a useful environmental mitigation for dental AGPs
- The use of fumigation and fogging devices with disinfection chemicals are not advised for using routine cleaning and or disinfection against COVID-19

Specialist advice from Health Board estates or NSS might be available on how best to achieve the recommended air changes. If this support is not available, the service of commercial companies with expertise in ventilation may need to be employed.

All of the information in sections 9 and 10 may need to be carefully risk assessed in relation to each individual situations. For more detailed information and advice please refer to the following ;

https://www.sdcep.org.uk/published-guidance/covid-19-practice-recovery/rapid-review-of-agps/

https://www.scottishdental.org/wp-content/uploads/2020/08/Ventillation-Final-Copy-1.pdf

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/928034/COVID-19_Infection_prevention_and_control_guidance_Dental_appendix.pdf

APPENDIX 1 Template

COVID -19 Risk Assessment

NB This risk assessment has been partially populated as an example and is not intended to be comprehensive or prescriptive. All COVID-19 risk assessments are specific to each setting

Dental Practice Name:	
Overall Responsibility for Risk Management:	
Date of Assessment:	

Areas of Risk	Specific Risk	Control measures	Actions required	Team Member Responsible	Completed (Date)
Facilities					
Outside Areas	Patient proximity to other patients	Clear 2 m markers displayed on railings Clear signage Use patient's vehicles as 'waiting area'	Visual indicators Good coms during triage phone call Revise coms viewed outside the practice Staff training for triage and welcome calls Appropriate appointment booking		

		Minimise foot patients waiting outside			
Practice Entrance	**Multiple touch areas and fomite transmission**	**Single entry door for patient to practice different from staff entrance at back** **Practice door locked internally** **Patient retrieved by buddy nurse in appropriate PPE** **Buddy nurse verifies COVID status and reminds patient of no touch policy** **Alcohol rub dispensed or escorted to hand washing facilities in free surgery** **No unnecessary public attendance unless chaperone required** **Tissues, Bin & cough etiquette**	**Clear roles and instructions for staff / staff training** **Clear signage** **ABHS available** **Tissues and bin provided** **Clear end of session cleaning procedure** **Good pre visit communication to educate patient on the new policy**		

		signage Regular environmental cleaning of door / door handle			
STAFF					
Staff to staff transmission	**Staff member test COVID +ve** **Considerable changes in working patterns, roles and responsibilities brings uncertainty** **Unclear roles and responsibilities** **Uniform contamination**	**Shield clinical from administration staff** **Individual working zones with high touch items such as phones, keyboards** **Staff aware of symptoms** **Considerable staff engagement with regard to training** **Staff meeting before session "huddle"** **Clear uniform SOP** **Discuss concerns re staff deployment /**	**Daily checklist, Training on symptoms** **Rota modification** **Training, team coms, careful rota selection** **Team coms and training** **Clear signage, staff training** **Follow NHS guidelines** **Staff training on covid symptoms** **Staff training programme to be compiled Use of Zoom etc** **Possible online courses to be investigated** **Time factored for this** **Staff changing area / signs** **Online resources**		

		vulnerable groups/ shielding			

COVID-19 Links for Reference

(This list is not exhaustive and many more sources of information are available)

National Infection and prevention control manual

http://www.nipcm.hps.scot.nhs.uk/

COVID-19: infection prevention and control dental appendix

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/928034/COVID-19_Infection_prevention_and_control_guidance_Dental_appendix.pdf

COVID-19: Guidance for the remobilisation of services within health and care settings

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/910885/COVID-19_Infection_prevention_and_control_guidance_FINAL_PDF_20082020.pdf

NSS SBAR Ventilation

https://www.scottishdental.org/wp-content/uploads/2020/08/Ventillation-Final-Copy-1.pdf

SDCEP Mitigation of AGPs in Dentistry Review

https://www.sdcep.org.uk/wp-content/uploads/2020/09/SDCEP-Mitigation-of-AGPS-in-Dentistry-Rapid-Review.pdf

HPS COVID-19 A-Z

https://www.hps.scot.nhs.uk/a-to-z-of-topics/covid-19/HPS

SDCEP -Remobilisation of Dental Practice May 20

https://www.sdcep.org.uk/wp-content/uploads/2020/06/SDCEP-Resuming-General-Dental-Services-Following-COVID-19-Shutdown-Update-120620.pdf

SG Covid-19 investigation and management

https://www.gov.uk/government/publications/wuhan-novel-coronavirus-initial-investigation-of-possible-cases/investigation-and-initial-clinical-management-of-possible-cases-of-wuhan-novel-coronavirus-wn-cov-infection

Face masks wear

https://www.gov.scot/publications/coronavirus-covid-19-interim-guidance-on-the-extended-use-of-face-masks-in-hospitals-and-care-homes/

HSE Health and Safety Executive's Working safely during the coronavirus outbreak – a short guide:

https://www.hse.gov.uk/news/assets/docs/working-safely-guide.pdf

https://www.hse.gov.uk/pubns/priced/l24.pdf

COVID-19 Staff Risk assessment

https://www.gov.scot/publications/coronavirus-covid-19-guidance-on-individual-risk-assessment-for-the-workplace/