

A Service Evaluation on the provision of Domiciliary Dentistry to Older Patients during the COVID-19 Pandemic

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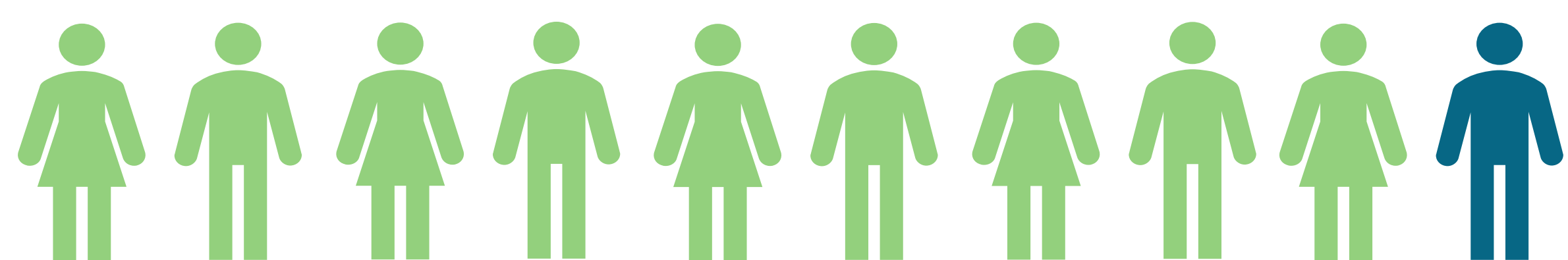
www.communitydentalservices.co.uk

Background

The outbreak of Coronavirus (COVID-19) resulted in a radical and rapid departure from normal life across England, and challenged healthcare professionals and healthcare systems nationwide, with dentistry being no exception. The **cessation of routine dental services** undoubtedly had a profound effect on the oral health of the population following the introduction of lockdown measures by the UK Government on the 23rd March 2020.

The older population have been the most impacted by COVID-19: 50,687 out of 56,698 COVID-19 Deaths have been among people aged 65 years and over ⁽¹⁾

Older patients have been challenged over the pandemic to spend more time at home, with marked changes to their care and support, as well as access to services including domiciliary dental visits. The dental profession faced significant difficulty in knowing how to support this patient group; including how to safely access these patients in their home or care home setting and utilising appropriate PPE and cross-infection procedures in order to minimise risk to a vulnerable patient group. Incorporation of domiciliary dentistry into the Urgent Dental Centre within the Community Dental Service CIC is the basis of this Service Evaluation, and how we can utilise the lessons learnt in continued provision of such an invaluable dental service.



9 in 10 deaths involving COVID-19 are in someone aged over 65 years of age ⁽¹⁾

Regardless of medical history, people aged 70 or over were identified to be at an increased risk of severe disease from COVID-19⁽²⁾, with "stay at home" guidance being paramount. This meant that there was a greater demand for domiciliary dentistry in order to reduce the associated risk of attending an Urgent Dental Care Centres or clinics.



Stay home



Protect the NHS



Save lives

Challenges and Solutions



Challenges

Solutions



COMMUNICATING AND TRIAGING challenges remotely with the older population



Presenting with **COMPLEX MEDICAL HISTORIES** and polypharmacy. High incidence of Dementia and Alzheimer's



INFECTION PREVENTION CONTROL and prevention of virus transmission by Dental Team



ACCESS challenges: patients unable to access UDCs, ability to access residents in care homes (high COVID risk)



PPE: Availability of PPE, ensure staff fit-tested and requirements from PPE



ORAL HEALTH RISK: older population are more at risk of chronic oral diseases

- Utilisation of wider healthcare teams as part of triaging process; General Medical Practitioners (GMPs), Support Workers, Pharmacists, carers and family members
- Training of CDS- CIC employees with the use of AccuRx video software
- Liaison with carers to complete video consultations during care rotations/home visits
- Keeping in touch calls, especially for those living alone with a lack of family/support network
- Liaising with GMPs, ensuring thorough and complete medical history obtained prior to visit
- Clinically Extremely Vulnerable patients to be seen as first patients of treating session
- Vigorous COVID-19 screening; delaying of treatment in COVID-positive or suspect patients
- Liaising with pharmacists to post prescriptions where required
- Training staff in use of Chlorclean disinfectant
- Procedures in place for set-up and clean-down of domiciliary vehicles
- Plans for appropriate donning/doffing of PPE and safe disposal
- Utilisation of Mobile Dental Unit
- Clinic flow formulated on return to clinic post DOMS visits
- Strict triaging in order to establish the most appropriate clinical setting for patients
- Liaison with care home staff to ensure appropriate "clinical space" for visit within home; well-ventilated and positioned to prevent unnecessary travel through the care home
- Training of CDS-CIC Clinical Staff in use of NOMAD Handheld x-ray units for use on domiciliary Visits
- Fit testing domiciliary teams for FFP3 masks
- All domiciliary visits to be treated as "high-risk" with full AGP PPE to be donned
- Guidance on how to safely travel to domiciliary visits and PPE use for the clinical team
- 'Reverse-barrier' nursing to protect the patient from potential transmission of disease from the DOM team, as well as regular staff COVID testing
- Oral hygiene advice and tooth-brushing instruction via telephone/video consultation
- Prescription of Duraphat Fluoride toothpaste (2800ppm or 5000ppm) and guidance on its use
- Remote consultations for patients, completing examinations via video

Aims

1. Development of protocols and procedures that allow for safe and efficient provision of urgent domiciliary dental care during the COVID-19 pandemic as part of the Urgent Dental Care Centre
2. Creation of robust operating procedures that allow for continued domiciliary dental provision as part of recovery of routine dental services across Community Dental Services CIC

Methods

Production of Standard Operating Procedure (SOP) by the Community Dental Services CIC

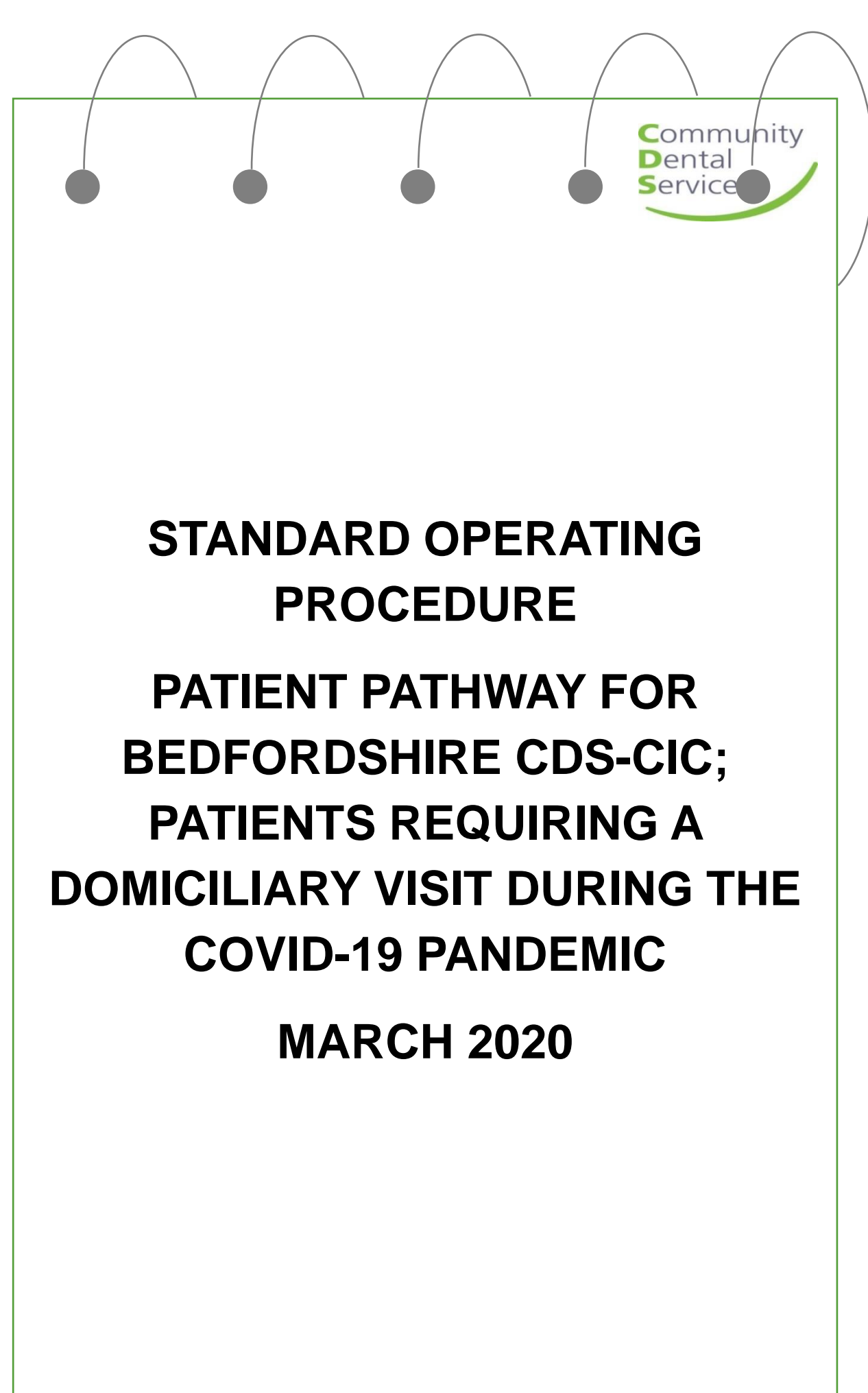
Collation of evidence from published National Guidance

Anticipation of challenges to be faced providing Domiciliary Dental Services

Provision of additional training, Team Meetings, as well as published flow-charts and diagrams in addition to written SOP guidance

Continual review of procedures and updates in line with National Guidance as well as public demand

Further developments to incorporate domiciliary Dentistry into CDS-CIC's Recovery of Dental Services to enable ongoing provision of treatment.



Results

Development of the Standard Operating Procedure allowed for the successful implementation of domiciliary visits as part of CDS-CIC's role as an Urgent Dental Centre.

An example of successful application was for patient CG, an 89-year-old female patient, with advanced dementia as well as a number of complex co-morbidities, residing in a Care Home. A telephone and video consultation revealed a history of a non-healing ulcer for the past 3 weeks on the right lateral border of the tongue. Guidance, protocols and procedures allowed a domiciliary dental team to visit the patient urgently within her care home setting, and establish the cause of ulceration as a sharp lower premolar tooth and subsequently could manage and treat this accordingly. Further telephone review and video review showed completed resolution after just 2 days. This allowed the team to rule out a differential diagnosis of oral squamous cell carcinoma and therefore an indication for a Two-Week-Wait (TWW) referral, ultimately reducing the strain on hospital 2WW services as well as preventing exposure of an extremely clinically vulnerable patient to hospital settings during the COVID-19 pandemic



Clinical image of right lateral tongue border visible during AccuRx Video Consultation

Discussion

The COVID-19 pandemic proved to be an incredibly challenging time for all in Dentistry, with the whole profession being required to adapt rapidly with ever-changing National Guidance. One particular challenge was how to deliver dental care to our older population, one of the most vulnerable groups to COVID-19. **Rapid development of in-depth SOPs enabled the implementation and provision of care during the height of the pandemic, and provided invaluable lessons for future service provision.** There is no doubt that COVID-19 will change the way we carry out operative dentistry, perhaps indefinitely. However, we need to continue to **develop, monitor and re-evaluate Standard Operating Procedures** to enable continued service provision for the most vulnerable patient groups, especially the older population. **Preparedness now means that we can continue providing domiciliary dentistry even with a second National Lockdown**, acting as a reassurance to those patients who rely so heavily on this service for both emergency and routine dental care.

References

1. Office for National Statistics 2020. Deaths registered weekly in England and Wales, provisional: week ending 30 October 2020 [Online]. Available at URL: <https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/deathsregisteredweeklyinenglandandwalesprovisional/weekending30october2020>
2. GOV.UK. 2020. Coronavirus (COVID-19) [Online]. Available from URL: <https://www.gov.uk/coronavirus>
3. Sky News. 2020. Coronavirus: 'Stay home' advice to change for vulnerable groups in England [Online]. Available from URL: <https://news.sky.com/story/coronavirus-stay-home-advice-to-change-for-vulnerable-groups-in-england-12103163>

With thanks to Patient CG and Next of Kin who have kindly consented to the sharing of the patient story and clinical photographs.