Building back better

Wayne Richards*, Jamal Ameen, Anne-Marie Coll and Teresa Filipponi

Since the contract of 2006, there have been improvements in the oral health of 12-year-olds in Wales.[1] The DMFT, DMFT for those experiencing disease and the percentage of the population experiencing disease have improved as can be seen in Table 1. It can also be seen that there continues to be inequalities in the disease experienced at Unitary Authority (UA) levels and these inequalities are associated with deprivation. It has been suggested that DMFT at age 12 years is a good indicator of future oral health in the community.[2] Furthermore, improvements in child oral health is reflected in adult populations.[3,4]

Both dentists and Local Health Boards (LHB) want to see improvements in oral health and one solution has been to increase the dental workforce, particularly in deprived areas. The LHB's seem to be addressing the placement of workforce equitably as reported in a recent paper published in the *BDJ*.[5] While workforce levels have increased, deprived subgroups continue to experience relatively higher levels of disease. Improving oral health in a diverse population like Wales cannot be achieved by increasing dental workforce alone. It is necessary to account for levels of deprivation.[6]

With this in mind it has been shown that a composite dental index combining the number of dentists per UA multiplied by the number of Lower Super Output Areas (LSOA) in the most 10% deprived per UA is a good predictor of DMFT. This has been called the University of South Wales Dental Index (USWDI).[6] Table 2 shows DMFT

Table 1 Changes in DMFT in 12 year-olds between 2001 and 2017

	% Diseased		DMFT		DMFT for those with disease	
	2001	2017	2001	2017	2004 (SIC)*	2017
Wales	45.10%	29.60%	1.09	0.61	3.39	2.05
Vale of Glamorgan	40.66%	17.30%	1.01	0.32	2.82	1.83
Blaenau Gwent	66.70%	51%	1.65	1.1	4.22	2.15

* SiC reported at this point in time4

Table 2 DMFT, Dentists/1000 (2019/20) pop, per UA

Unitary Authority	DMFT	Dentists/1000 pop
Blaenau Gwent	1.10	0.52
Caerphilly	0.95	0.55
Torfaen	0.94	0.61
Angelsey	0.84	0.59
Merthyr	0.72	0.85
Denbigh	0.71	0.88
Neath Port talbot	0.70	0.63
Wrexham	0.70	0.56
RCT	0.66	0.53
Newport	0.63	0.49
Pemb	0.63	0.40
Gwynedd	0.63	0.43
Flint	0.60	0.48
Conwy	0.52	0.50
Swansea	0.52	0.74
Monmouth	0.50	0.51
Ceredigion	0.49	0.51
Bridgend	0.47	0.60
Carmarthen	0.45	0.54
Powys	0.41	0.57
Cardiff	0.41	0.70
Vale	0.32	0.56

with corresponding Dentists per 1000 per UA.

It can be seen in Merthyr Tydfil and Denbigh, deprived areas, the number of dentists per 1000 is 0.85 and 0.88, the highest in Wales, yet these areas are not in the lowest caries band. The USWDI as a predictor of DMFT could be a useful tool for UA's and Welsh Government to monitor the macro delivery of oral health care for the future in Wales.

COVID-19 has placed restrictions on the delivery of dental care in the UK. Whether the pandemic will impact on the improvements in oral health is yet to be seen. The Welsh Government has supported General Dental Practitioners holding NHS contracts.[7] Practical policies have been created to attend to urgent problems and make routine treatments to be based on risk with appropriate recalling according to risk. This provides an opportunity for dentists to develop needs-based services through following NICE (2004) guidelines and reforming their business models for providing oral health care.[8] This will increase capacity within NHS dental practice, provided that supply induced demand does not fill the void.

There is a clear opportunity for dentists to take a future collaborative view to provide dental services. One possible aim could be to cover the population and impact on caries

prevalence through preventive approaches. This fits well into FDIs Vision for 2030.[9] With the population covered and providing care on a prevention basis, the profession can be seen to be within the realm of health care. It would certainly show the Welsh Government that the profession was health driven. We would imagine that the Welsh Government would value good macro dental outcomes and continue to support dentistry, visibly supporting putting the 'mouth back into the body'. Clearly not all dentists will favour this view and will wish to act individually on the basis of supply induced demand for services. The challenge for the Welsh Government will be to engage with the profession to develop services in order for health outcomes to be recognised by LHBs. LHBs can then adequately reward providers who contribute towards such outcomes. GDPs are then able to make a value judgment on whether to develop and provide business models based on supply induced demand, health or a mix of both. It will be increasingly difficult to justify subsidies from the public purse without improvements in health statistics. With 70% of 12-year-olds caries free, improvements can only be made if inequalities are addressed, another goal within the FDI vision for 2030. Therefore, the collaborative future view becomes quite an important issue.

Epidemiological surveys show that the prevalence of caries is greatly reduced. Along with a healthier population, contemporary minimal intervention oral care is considered the optimal treatment, replacing historic accepted treatments.[10] Where once the legal fraternity would hold to account those dentists practising supervised neglect, today the lawyers are holding to account those dentists who intervene with irreversible treatments.

Business models based on caring for higher socio-economic groups with low levels of disease is not attractive to the public purse. Currently individuals are prepared to pay for care based on the principle of supply induced demand. Some have already voiced a view regarding this state of affairs; Rehan, in the context of demand for dental workforce, when asked if more dentists were needed stated: *'if they want to locate in saturated markets or middle to upper income urban areas and want a significant self-pay patient base, I would say no.'*[11]

The Welsh approach to the development of General Dental Services in Wales focuses on prevention as a cornerstone of care.[12] Although the current approach is based on process monitoring, whether the processes impact on oral health outcomes is yet to be seen. Currently outcome monitoring is in discussion.[13] The development of equitable performance criteria by the Welsh Government and LHBs is fundamental to both improving oral health and rewarding GDPs for achieving this. We have suggested monitoring outcomes according to deprivation/continuing care data.[14]

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COVID-19 has forced dental provision into a crisis situation. This could be the catalyst to re-building better services and improving oral health. This should be attractive to the Welsh Government and LHBs to improve the oral health of the Welsh population.

With increasingly successful prevention strategies, oral health could/will improve. Whether 'could' becomes 'will' has the potential to be influenced by the appropriate application of behavioural tools such as motivational interviewing as one example. The RECUR trial reported that it has implications for changing paediatric dental practice internationally. Motivational interviewing training provides opportunities for dental nurses to facilitate behaviour change improving the oral health of children at high caries risk.[15]

This provides GDPs with an ethical platform to deliver elements of dental care based on supply induced demand. Hereby, there is a win-win for all concerned. Moreover, this is in tune with a post COVID-19 levelling up mood addressing social inequalities and the FDI vision for 2030. A glimmer of light at the end of a very dark tunnel for dentistry? ◆

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