

## **The development of a Designated Dental Pathway for Looked After Children and qualitative evaluation of staff and user perspective**

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## **Abstract**

**Objective:** To explore the impact of a community based dental care pathway on the dental care of children entering residential or foster care. **Design:** The study used qualitative data collected during interviews with children who used the service, their carers and key professionals involved in the pathway, and routine quantitative data concerned with care entry and the dental service use. **Results:** The Dental pathway facilitated dental care access for children entering statutory care, met the dental needs of service users even when dental care provision proved challenging, offered a consistent dental service regardless of care moves. Improved interagency integration and support was reported by key professionals as was better dissemination and documentation of dental assessments and outcomes. **Conclusion:** The dental care pathway had a beneficial impact on the dental access and experiences of children who used it, promoted better interagency working and facilitated record keeping. These findings call for extension of the service to a wider population to allow further evaluation of its impact and efficacy in different regional areas and contexts.

## **INTRODUCTION**

The knowledge that children entering residential or foster care share many of the health problems of their peers but often to a greater level<sup>1-5</sup> underpins a call for Local Authority and Health services to work together to commission health services for all looked after children and young people<sup>5</sup> (LACchildren). When considering whether dental services should be included in this call the small evidence base around the dental state of LACchildren in the UK suggests they should. Children in UK statutory care tend to have relatively high levels of poor oral care, dental neglect and disease<sup>6-9</sup>, little

regular dental attendance before care entry and higher needs for treatment when they attend a dental surgery<sup>10</sup>.

Clinical Commissioning Groups, Local Health Boards and Local Authorities bear responsibility for providing adequate services to meet the health needs of LAC children in England and Wales with use of primary care services encouraged<sup>5</sup>. This suggests the general dental service (GDS) may be the most appropriate body to meet the dental needs of LAC children. However, the association of LAC children with treatment barriers such as poor dental attendance and fear of treatment<sup>11-12</sup> and reports that many LAC children suffer from significant conduct disorders<sup>13</sup> suggests treatment within the GDS may sometimes prove challenging. An understanding that specialist services may be required to fully meet LAC children's health needs exists<sup>14</sup> turns attention to the role of community dental services (CDS) in treatment provision. Although a recent audit found that the majority of CDS across England and Wales<sup>15</sup> were involved in the treatment of LAC children to some extent, no systematic pathway to guide the dental treatment of LAC children within the CDS appears to exist.

Designated health professionals working in a multi-agency 'Raising Health and Education of Looked After children (RHELAC) support team in the North of England recognized that although their local CDS treated LAC children quite effectively, the system was 'ad-hoc' and could be improved. A wider group of the RHELAC team, and additional dental and social professionals was formed to design a designated dental care pathway (DDCP) for the dental care of LAC children, which had been providing care for LAC children since 2011.

The pilot nature of the DDCP called for an accompanying evaluation. Drawing on resultant data this paper aims to explore the context the service was developed in, the process of the DDCP and whether the DDCP met a set of primary aims: to ensure all children entering the care system were offered dental care quickly; were offered a service that met the dental needs of children who used them in an acceptable way; whether the service impacted positively on the inter-agency working of key professionals involved and kept them informed of DDCP use, dental assessments and care outcomes.

## **METHODS**

### **Study Design**

The evaluation used qualitative semi-structured interviews and routine data. Ethical approval was provided by Newcastle and North Tyneside Research Ethics Committee.

### **The Intervention**

The DDCP stipulates that the dental health of children entering care is discussed at the primary medical assessment and. DDCP referral offered routinely. DCCP use is triggered by a RHELAC notification form sent to the CDS dental team. The form contains:

- LACchildren personal details
- Contact information for social workers and foster services
- Reason for care entry
- Consent for routine dental care from birth parent/adult with parental responsibility

The DDCP team contacts carers, an appointment is arranged and a dental assessment conducted at a designated session at a specific CDS clinic. The resultant Dental Health Action Plan (DHAP) sets out an assessment of the child's oral health status and a dental treatment plan. Copies are forwarded to the LACChildren medical team and the child's social care team. Subsequent dental visits provide oral health sessions for all members of the foster family/residential unit, and dental treatment and/or referral to secondary dental services as required. On completion a further DHAP containing treatment details is circulated to all concerned personnel. A GDS or DDCP recall is organised as preferred.

Figure 1 shows the pathway and it's use during the evaluative period.

**Figure 1: The Designated Dental Care Pathway**

**Recruitment**

The pilot nature of the project meant the potential participant group was small, therefore the aim was to consult representatives of all groups involved in the DDCP. Consequently semi-structured interviews (n=16) were conducted with: a LACChildren designated paediatric consultant (DPC, n=1), a community dental officer (CDO, n=1), a community dental service clinical director (CD, n=1, a LACChildren health assessment administrator (HA, n=1), an independent review chair (CR, n=1), LACChildren and foster carer social workers (SW, n=2), LACChildren who used the DDCP (n=3) and carers (Residential carers RC, n=2, foster carers FC n=3). One local GDP also contributed (n=1).

Professionals were approached individually, information sheets provided and written consent gained. Carers were approached during clinic visits or by letter, written information was provided and written consent gained before interviews. LACChildren

were approached through carers who discussed involvement, gained consent and arranged the interviews.

### **Data Collection**

Routine data collected during statutory care entry and DDCP use gave information about the numbers of children who:

- Entered residential or foster care in the area served by the DDCP over a 12 month period (2011 -2012)
- Were offered, referred to and used the DDPC.

Oral health promotion specialists conducted face-to-face interviews either in professionals' places of work or in the homes of LACchildren and carers. All interviews were digitally recorded.

### **Data Analysis**

Interviews were transcribed, anonymised and entered into password-protected university files. Analysis using NVivo 9.2 identified a the following themes around which an analytic framework-matrix was organised:

- a) The dental health of LACchildren on entering care
- b) Dental treatment for LACchildren before the DDPC
- c) The experience and receipt of the DDCP
- d) The impact of the DDCP on interagency working and knowledge

Quantitative data was entered into SPSS 18 to gain descriptive statistics of the DDCP take up and the children who used the service.

## **Results**

Over a 12 month period 89 children and young people entered care and were offered DDCP referral. 49 accepted, 35 intended to visit a GDP, 5 left care (Figure 2).

### **Figure 2. Recruitment and use of the DDCP**

The 49 referred children were 0 – 17 years: 24 male, 24 female (1, no response). 44 (89%) LACchildren were classified white (British/other), two African, one European, (two no response). 11 of the 49 children who made appointments for a DDCP assessment did not attend (DNA). Table 1 shows a number of the 39 children who used the DDCP, DNA'd on at least one occasion.

#### **Table 1 LACchild attendance assessments visits**

12 children required further dental treatment. Table 2 shows this took 1 - 6 visits.

#### **Table 2: Number of treatment appointments**

Qualitative analysis collected information about the dental health of LACchildren in the area served by the DDCP before care entry and their dental treatment options pre-DDCP. It also explored the provision and receipt of DDCP and its impact on interagency working.

## **The Dental Context**

### **a. The dental health of LACchildren on care entry**

A history of poor dental attendance, hygiene and poor diet was reported by experienced social workers, residential and foster carers.

Many LACHildren had little experience of dental attendance or a record of irregular attendance before care entry *'a lot of them didn't have any [dentist]'* (RC1), *'although they had been on the roll of a local dentist they hadn't been for some time'* (RC2). Poor attendance contributed to high levels of anxiety and appointment refusals *'some would rather put up with toothache than go to the dentist'* (CR).

Poor oral hygiene was also noted *'reflecting perhaps their neglected circumstances, they presented with much worse oral hygiene than their peers'* (SW1), some children have little experience of tooth cleaning at all *'I've done lots of littlies, the younger children, and sometimes they've never had a toothbrush never mind anything else....with the older ones it's even harder, trying to establish a routine they've never had'* (FC1).

Many older LACHildren displayed poor attitudes to oral health *'ranges from really poor to OK.... we get very few young people who come into our care with really positive messages around dental health care'* (RC1). Other threats such as a poor diet *'they would eat sweets, crisps..erm....no the diets are very poor, vegetables...erm most of the children that come to me could only identify maybe two vegetables'* (FC3) and prolonged use of dummies/bottles *'the oldest one? seven, with a dummy!'* (FC3) were identified.

#### **b. Dental pathways pre-DDCP**

Many LACHildren used the GDS, but for some accessing dental care through this route provide difficult or impossible.

Some LACHildren continued to attend family dentists, although travelling or potential contact with birth parents could prevent this *'they don't want to go back to the family dentist in case there are problems with parents coming across them,'* (CD). If no family



dentist existed or was inaccessible carers had to seek treatment, usually within the NHS. This was possible if *'foster carers have built up a good relationship with their professionals, so you'll find the dentists are very tolerant of LACchildren '(SW1)'*. Otherwise no system to ensure NHS access existed *'I had to say 'ahh you [carer] ring NHS direct and see if you can get a dentist.'*(HA). There was some history of GDPs referring LACchildren into the CDS *'sometimes foster children were referred [to CDS] by various dentists (CDO)*.

The time needed to treat LACchildren with behavioural or emotional difficulties appeared to be a barrier to accessing treatment in the GDS *'the children have quite complex needs, they can at times be quite challenging, quite disturbed.'*(RC1). To complicate this, underlying difficulties were sometimes sensitive and difficult to address *'I brushed against his face as you do in clinical work, and he completely flinched. It was only at this point we started talking, it was an indicator of the abusive relationship he had with his father.'*(CD). Time was also a problem when treatment needs were high *'you can't justify having the child for a long time' (GDP)*.

When appointments had been booked, a late cancellation or failure to attend often ensued *'they haven't been to the dentist for a long time.... then they are suddenly faced with a dental appointment, and often they are fine, and then the day before or the day of the appointment, they categorically refuse to go,' (RC1)*. Experiences of LACchildren being de-registered were common *'we have had dentists who have terminated people because they have not turned up for one appointment or they have turned up and they felt their behaviour is not appropriate for a dentist (RC1),*.

## **The DDCP**

### **a. DDCP experiences**

The DDCP was valued for accessibility, expertise and flexibility.

The link between medical and dental services allowed quick access *'in the past there have been gaps of 2 or 3 months .....and now we can get that service almost immediately, it's made a huge difference.'*(RC2). CDS staff were experienced in treating patients with additional needs *'our clinicians are incredibly skilled at getting all sorts of people to do all sort of things, because they take a lot of time and they have built up a relationships over a long time.'* (CD) and possessed knowledge of LACHildren's needs *'they're used to dealing with the type of children we have, because..umm... these aren't ordinary children. These aren't run of the mill, like sort of cross section. These are normally very damaged.'* (FC3).

DDCP resources allowed additional/prolonged appointments if necessary *'that's to us a major advantage to have somewhere like that rather than a really busy dental surgery'* (RC2). The success of this was demonstrated by treatment completion *'I have not had any of the LACHildren actually, who, who have not really stuck with me and got something done'* (CDO).

The DDCP had resources which coped with missed/cancelled appointments *'the communication has been absolutely brilliant..... Obviously we try and let them know if young people are not going to attend, but umm that can be a very short space of time beforehand and there has been massive understanding around that'* (RC1). DDCP staff have visited non-attending LACHildren to make contact, describe the service and alleviate anxiety. The DDCP also provides care continuity if LACHildren change placements or return home *'[and] continued to access care here'* (CDO).

Concerns about the DDCP sessions being seen as stigmatising proved unfounded *'there is always this thing about stigma with LACHildren, but no one is going to know they go to a specialist LACHildren dentist, it's not really the kind of thing children talk about'*

(SW2), as did anxiety that travel difficulties to the clinic may prevent use. Although some respondents thought GDS treatment may be perceived as more normal and therefore preferable, it was felt that this was not possible for all at present *'you would hope that every LACchildren would could attend a GDP like everyone else.....and the service would be really sensitive and responsive to their needs. But we are not there. That's not the case.'* (RC1).

There was some feeling the DDCP benefited carers *'it's one less thing for them to worry about and sort out themselves when they have so many things to do.'* (CDO). Carers gave good feedback *'the young people who have gone up there have been treated with respect....and they received extremely good dental care as well,'*(RC2). LACchildren echoed this *'I would go every minute!'* (LAC1), *'Some people would just do stuff but she is very caring when she is going to do stuff to your teeth. The rest of the team, they are just the same'* (LAC2)

#### **b. The impact of the DDCP on interagency working**

The DDCP appeared to improve interagency working and the dissemination of dental health assessments/outcomes.

Dental staff could contact medical and/or social workers *'I have got other people to go to if they do miss appointments or I have concerns about their dental health'* (CDO). The DHAP form seemed to have improved interagency awareness of dental service use, although a couple reports indicated there was some need for improvement *'I know they have been to the dentist and whether they needed treatment or not. But no-one said to me that they have been to this service'* (CR). Feeding dental records back into the social care system appeared to help social care professional keep better records about whether statutory demands were being met *'there is an administrative advantage in terms of a*

*targeted service,...a greater ability to monitor attendance, monitor health care, oral care' (SW1).*

Professionals appreciated having a support system for wider concerns '*Having clinical relationships with a designated nurse and doctor means if the dental team have any wider concerns for child they have an immediate source of help and advice our staff have someone to go to, somebody specific who has knowledge and expertise' (CD).*

## **Discussion**

This study adds to the limited knowledge about the dental health of LACchildren in the UK and, to our knowledge is the first to explore the work of a dental system tailored to the needs of LACchildren.

The study adds to evidence that LACchildren often enter care with little experience of receiving regular dental care and with existing dental needs <sup>10-12</sup>, and furthermore indicates the oral health of LACchildren is often compromised by poor oral hygiene, histories of unhealthy diets and prolonged use of bottles and dummies.

The study also suggests that although many LACchildren receive dental assessment and care through the GDS, access and use of the GDS can be dependent on a carers' resources and the needs and behaviours of LACchildren. The possibility that dental care within the GDS cannot be found for some LACchildren cannot be discounted. This situation calls for routes such as the DDCP that ensure all children can access dental treatment when they enter care and during their time in care.

Overall, the DDCP ensured quick access to a dental team used to working with patients with additional needs, it also led to good levels of treatment completion which demonstrated the value of specialist health services to meet the health needs of LACchildren when needed<sup>14</sup>. The ability of the DDCP feedback loop to identify and

disseminate incidents of LACChildren non-attendance was useful in facilitating follow up by dental and/or social teams, although gaps within the system after a DNA became obvious and efforts to remedy them are needed. Despite this, the DDCP generally provided continuity of dental care for LACChildren using the service, even after residence changes which are often barriers to health care access for LACChildren<sup>16</sup>.

In summary, the DDCP produced high levels of satisfaction amongst LACChildren and their carers. It was established through relatively minor, mostly administrative changes which integrated existing services to produce a system which ensured access to NHS dental treatment, and enabled all concerned with the child's care to be kept informed of service use and outcomes. This reinforces opinion that LACChildren services require good design, integration and information sharing between all involved<sup>17</sup> and calls for consideration of whether the DDCP model could be extended to GDS where no system to disseminate records of LACChildren's dental treatment exists.

Most study limitations grew from the study size and its pilot nature. Cautious interpretation of the low percentage of LACChildren requiring dental treatment (34%) is advised as the some of the areas study children were raised in are artificially fluoridated water<sup>18</sup> and could have affected dental disease levels found. The small size of the sample also raises questions about travel and access to the DDCP which appeared unproblematic in this case but may cause problems elsewhere.

## **Conclusion**

This study supports evidence that many LACChildren have dental needs on statutory care entry, and suggests that accessing care within the GDS can difficult at present. The DDCP was able to offer LACChildren quick access to comprehensive, consistent dental care and ensure feedback about the child's dental service use and outcomes to all key

professionals. The lack of a similar system elsewhere calls for a wider trial within the CDS in England and Wales and consideration of extending the system into the GDS.

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**Table 1. LAC attendance at assessments visits**

| DNA incident/LAC | N  | (%)  |
|------------------|----|------|
| 0                | 32 | 65.3 |
| 1                | 11 | 22.4 |
| 2                | 2  | 4.1  |
| 3                | 4  | 8.2  |
| Total            | 49 | 100  |

**Table 2 . Number of treatment appointments**

| Treatment appointments (n) | LAC(n) | Total |
|----------------------------|--------|-------|
| 0                          | 26     | 0     |
| 1                          | 4      | 4     |
| 2                          | 4      | 8     |
| 3                          | 3      | 9     |
| 4                          | 1      | 4     |
| 5                          | 1      | 5     |
| 6                          | 1      | 6     |
| Total                      | 40     | 36    |



