

Learning from school nursing practices and new ways of working during the COVID-19 pandemic: A qualitative study

COVID-19 has had unprecedented effects on children's health and wellbeing (Morris and Fisher, 2022). During the pandemic, school nurses across the world swiftly adapted their practice, demonstrating flexibility and creativity to mitigate negative health outcomes for children (Cook et al, 2022). However, COVID-19-related restrictions meant that they faced significant challenges in accessing and supporting children. A United Kingdom (UK)-based survey study highlighted that school nurses' work became largely reactive during COVID-19, reducing opportunities for preventative work (Sammut et al, 2022). This, together with constraints on children's ability to seek support, resulted in delayed identification of concerns, and more complex problems once identified.

This qualitative study aimed to explore UK school nurses' experiences of how COVID-19 and the associated restrictions had an impact on their practice. An uncharted area, this was part of a larger study which included an international literature review (Cook et al, 2022) and UK-wide survey (Sammut et al, 2022) to explore this new landscape. For this stage, data collection focused on gathering information on the practical methods introduced or accelerated by school nurses to aid practice, the impact of COVID-19 restrictions on school nurses' ability to support children, changes to interdisciplinary working, and new practices school nurses felt should endure post-pandemic. Our discussion focuses on the implications for service delivery going forward.

Method

Design and sample

We used virtual focus groups and one-to-one interviews to collect data. A pragmatic approach was taken, seeking practical understandings of real-world issues to produce socially useful knowledge (Patton, 2005: 153; Morgan, 2014: 1046). The interview schedule (see *Appendix 1*) was developed for this study, guided by input from an advisory group (consisting of school nurses and

Abstract

Aims: To explore school nurses' experiences during the COVID-19 pandemic, focusing on: methods enabling service delivery, factors affecting school nurses' ability to support children, work with the interdisciplinary team, what pandemic-related practice changes should endure.

Design/method: The study took a pragmatic approach. A purposive sample of 20 school nurses participated across ten virtual focus groups and one-to-one interviews. Data were analysed using reflexive thematic analysis.

Results: Four overarching themes were identified: the impact and legacy of COVID-19 on children and families' health; the rapid restructure of service delivery; workforce challenges; the school nurse profile before, during, and after the pandemic.

Conclusions: Recommendations are made for considered use of virtual modes to enhance rather than replace in-person practice, building a robust evidence base that can inform future commissioning, clear guidance regarding the boundaries of school nursing practice in the context of increasing workloads, investing in the school nurse workforce going forwards.

Key words

School nursing, COVID-19, workforce, child welfare, mental health

Dr Sarah Bekaert, senior lecturer, Faculty of Health and Life Sciences, Oxford Brookes University, Oxford, UK

Dana Sammut, research associate, School of Nursing and Midwifery, Institute of Clinical Sciences, University of Birmingham, Birmingham, UK

Dr Jane V Appleton, retired, Faculty of Health and Life Sciences, Oxford Brookes University, Oxford, UK

Professor Julie Taylor, professor of child protection, School of Nursing and Midwifery, Institute of Clinical Sciences, University of Birmingham, UK

Tikki Harrold, school health nurse, Oxford Health NHS Foundation Trust, EOHC, Manzil Way, Oxford, UK

Dr Georgia Cook, post-doctoral researcher, Faculty of Health and Life Sciences, Oxford Brookes University, Oxford, UK

Email: sbekaert@brookes.ac.uk

professional organisation leads). The questions were further informed by findings from earlier phases of the research programme (Cook et al, 2022; Sammut et al, 2022). This ensured the interview schedule was contextually relevant and informed by appropriate theory (Kelly and Cordeiro, 2020).

Purposive sampling was adopted to recruit UK-based school nurses. The final page of an online UK-wide survey which preceded this qualitative stage (Sammut et al, 2022), invited school nurse participants to take part in follow-up focus groups. In addition, professional school nurse organisations (School and Public Health Nurses Association [SAPHNA], and the Community Practitioners' and Health Visitors' Association [CPHVA]) shared an online advert for this study via their communication channels. Participants registered their interest by providing their email address on an online form, separate from the survey to maintain anonymity. There were 75 initial expressions of interest. Prospective participants were sent an email containing a participant information sheet, privacy statement and consent form, and a list of dates/timeslots. Participants could also opt to attend a one-to-one interview session. The final sample consisted of 20 participants across 10 sessions (six focus groups and four one-to-one interviews). Participants were mainly based in England ($n=18$), specifically the North East ($n=1$), North West ($n=1$), Midlands ($n=4$), London ($n=3$), South East ($n=7$) and South West ($n=2$); and Scotland ($n=2$). All participants were practising school nurses during COVID-19, they ranged in role and experience, included team or clinical leads, advisors and managers, and practice educators. Participants worked across state and independent schools, and with both primary and secondary school-aged children.

Data collection

Focus groups and interviews were conducted and audio-recorded via Zoom, with automatic transcription settings enabled. To support facilitation in an online environment, each session contained a maximum of four participants. Sessions were run by facilitators experienced in focus group/interview methods, and supported by co-facilitators with school nurse expertise. Where only one participant signed up to or joined a session, they were offered the opportunity to continue as a one-to-one interview, or reschedule to an alternative session. Where participants opted to proceed one-to-one, co-facilitators exited to avoid outnumbering the interviewee. Twenty school nurses participated, with sessions lasting between 50 and 80 minutes. All sessions were conducted in June and July 2022.

Ethical considerations

The study received ethical approval from Oxford Brookes University Research Ethics Committee no: 211550.

Data analysis

Each Zoom transcript was reviewed by the session facilitator, and checked against the recording for

accuracy. The data were analysed using a six-step reflexive thematic analysis (Braun and Clarke, 2006, 2019). Three researchers (SB, GC, DS) familiarised themselves with the data (stage 1). Semantic inductive coding was undertaken (stage 2), in line with our intention to focus on participants' experiences and a practical understanding of real-world issues. Coding was undertaken by one researcher (SB) across all transcripts, and session facilitators (GC, DS) also coded their own transcripts, before coming together to discuss and reflect upon early patterns. This collaborative approach continued until consensus was reached (stages 4 and 5). Through this reflexive approach, we captured experiences as described by school nurses themselves, and could make realistic and 'actionable' recommendations (Kelly and Cordeiro, 2020) (stage 6). Minor edits have been made to quotations for readability.

Results

Four themes were identified:

- The impact and legacy of COVID-19 on children
- The rapid restructure of service delivery
- Workforce challenges
- The school nurse profile before, during, and after the pandemic.

This gave insight into school nurses' experiences during the pandemic – from direct work with children, to how this work was delivered, to how the school nurse service was affected. Running throughout was commentary on how these changes affected the school nursing profile within the interdisciplinary team.

The impact and legacy of COVID-19 on children and families

Most participants indicated that the pandemic exacerbated many children's pre-existing vulnerabilities, resulting in increased health needs. Restrictions in oversight of, and contact with children, meant missed opportunities for early intervention work. This was particularly notable in the escalation of safeguarding issues:

'The referrals that are coming in to school nursing and to other services are coming in at a much higher level. Because nobody's picked up on that, you know, and put any early intervention work in. So they're coming in, really concerning safeguarding issues, whereas it might have been picked up by pastoral staff, etc. in school beforehand.' (P10)

The exacerbation of issues often coincided with a reduced opportunity to access other key services for much needed support as specialist services were overwhelmed with referrals. Most notable was huge demand for mental health support:

'CAMHS [children and adolescent mental health services], they are ... just this massive waiting list,

so I just feel there's so many children who are ... in real distress and can't get the support unless their parents can afford to pay for counselling or something, which they can't, or a lot of them can't. (P20)

This left school nurses holding complex and challenging caseloads, responsible for supporting increasing numbers of children needing, but unable to access, specialist support. School nurses went on to describe how this situation has not abated post-pandemic. The legacy of COVID-19 for many children is enduring, and school nurses continue to work with increased and complex caseloads:

'We are definitely seeing a post-COVID spike in you know massive problems... That's a national thing I think, I think figures have gone up exponentially. We are certainly seeing the aftermath locally, and I probably have not met a practitioner that hasn't said the same.' (P16)

Service delivery/structure

Many participants spoke of having to balance what was needed (the delivery of key services) with what was feasible (the limitations of their caseloads, staffing levels and restrictions). This required adaptations to how services were delivered. Alternative consultation modes (i.e. non-face-to-face) were used more extensively, expanded or improved. In this example an existing service for children was adapted so parents could ask health related questions:

'ChatHealth, which is a text messaging service for young people... We adapted that to include parent access ... so for the primary school-aged parent, they were able to call, text in and get questions answered... We had our highest figures in all the time I've been doing it, since we introduced it into our service in 2016.' (P15)

New ways of establishing safe in-person contact with children were also implemented. Home visits, for example, offered unexpected benefits:

'I actually did a lot more home visits ... making a better connection with the family and also ... seeing context... I think it's one thing to discuss it but to actually see it ... and so that helped.' (P19)

'Walk-and-talks' were also a way of having distanced, yet in-person, contact with a young person:

'I think the girl was probably a bit anxious of coming into my office at school, so I did a walk-and-talk after school and that worked well... I don't think it would have occurred to us to have done them before the pandemic, but now it's an option.' (P9)

Although different methods had varying levels of success in different locations:

'My school's in the centre of [town], a lot of my students are vulnerable, they didn't want to be seen out with the school nurse walking and talking ... in [town]...' (P8)

The success of different methods could be influenced by the child's age. For example, work with young children tended to be less formal, which was difficult to recreate virtually:

'One of the techniques I use is to sit down with a young person with a colouring book and some crayons and just let them doodle away, sitting on the side of them, so that they're not face on ... ask some questions and listen to what comes out ... not to be able to do that really impacted on how we could demonstrate empathy to them, how we could hear them properly, how they could hear us, how we could read their body language.' (P15)

The rapid restructure of service delivery

As modes of practice changed with children, so there were changes behind the scenes to reduce workload and adhere to infection control measures. This was predominantly through moving activities online and going 'paperless'. For example:

'Our reception health questionnaires that used to go out as paper copies now go out as virtual copies... Our immunisation team has virtual consent that's been ... they've been using that for a while, and I think COVID has sped that on quite nicely.' (P5)

Participants also talked about processes introduced to help manage and prioritise their expanding safeguarding caseloads:

'They flagged all the students as red, amber or green as to how often they were going to be contacted.' (P8)

New channels for interdisciplinary collaboration were introduced, including working groups, virtual early help meetings, and weekly school staff huddles which improved communication and rapidity of dealing with emergent issues:

'We had a working group called "joint responses", made up of education, social care, school nursing and a few other support organisations.' (P6)

Workforce challenges

In many cases, the school nurses reported that their services entered the pandemic with an already depleted workforce:

'So in [London Borough], unfortunately we're working with a very low, low number of school nurses.' (P13)

COVID-19 demands had also coincided with planned structural changes to school nurse teams, adding pressures:

'Unfortunately we had redundancies the week of lockdown ... those roles weren't replaced ... so our medical team has reduced drastically.' (P2)

In some areas, school nurses were redeployed (for example, to health visiting, community or district nursing teams):

'Many of us were redeployed. We were suddenly covering numerous schools and caseloads.' (P8)

School nurses also spoke about the challenges of recruiting and retaining school nurses during the pandemic:

'We had new people start just before the pandemic, school nursing wasn't what they thought it was going to be so they left ... We've just not been able to recruit into post.' (P15)

Consequently, with the emotional challenge of colleagues moving on and the practical challenge of increasing workload, remaining school nurses' spirits were low:

'I think staff morale probably was infected and it's difficult to get back to where we were.' (P19)

COVID-19 restrictions also prompted a number of structural changes both in how school nursing services were delivered and how school nurses worked with partners. Participants reflected on the impacts of these changes both during the pandemic and beyond, with some indicating that certain changes will be sustained for broader reasons:

'Our team has decided that we will not be going back to office-based work, but we will carry on working from home, and they've said that that's actually because they're now meeting their carbon footprint agenda.' (P19)

Many commented on how online connectivity with partner agencies had greatly improved communication between agencies and the importance that this should continue beyond the pandemic:

'It was always very difficult to get police, always difficult to get education involved, and school nurses, all in one area, but actually I think the new way of working really helped. I think using the online facilities

really, really helped. And that's something that I really want to continue with.' (P3)

Although in other areas the retreat of, and demand on, specialist services led to a loss of connectivity within the interdisciplinary field. Here, work would need to be done to restore communication channels post-pandemic:

'In my locality, it does seem like everyone just went into their silos... We're dealing with what we're dealing with, and we're focusing on our service, and that kind of inter-communication really is gone. And they're really pushing now ... trying to build all those links back up.' (P19)

There was also variability in the support that school nurses received. Some received a high level of support:

'We have supervision, child protection supervision, clinical supervision and managerial supervision every eight weeks. I actually felt looked after' (P3)

Whereas for others:

'There was no clear leadership, we were literally picking things up off the news or off WhatsApp groups with other nurses or Facebook groups.' (P2)

Working from home meant that informal support networks were not available, leaving some processing harrowing experiences alone:

'If you're on a strategy call - and you hear the most ghastly things - you put the call down, you've got no-one here to have ad hoc supervision with. What do you do? You go outside, you sit in your garden, and you cry. You know, what else can you do?' (P15)

Several school nurses described organising their own strategies to facilitate peer support:

'We actually ended up setting up a support group for the independent schools in our area. So when things were changing very fast with COVID ... everyone was pinging stuff and saying "well, what do you do, what's your challenges?"' (P1)

The school nurse profile before, during and after the pandemic

The school nurses' profile – how they felt they were regarded by others – was a common topic of discussion. Many felt that their role was marginalised and undervalued in comparison to other health-care providers:

'Often people forget that school nurses and health visitors are very similar in their role... Health visitors are sort of put up higher than school nurses yet we do the same work, we do the same qualification and

'we actually cover the vast majority of the population, compared to health visitors.' (P6)

This was reinforced in their minds when many areas decided that school nurses could be redeployed during the early stages of the pandemic, in some cases to health visiting teams. Redeployment also created a less visible service, challenged in maintaining their offer. However, participants also indicated that an unexpected benefit of their expanding role was greater appreciation and understanding of their remit by allied professionals:

'Often you would get social workers who have no idea about the type of job that we did, but as time went on, sometimes we'd be doing joint visits with them and things like that, and I think a lot of them really began to understand the value of the role of the school nurse.' (P17)

The fact that school nurses responded to need where other services retreated raised their profile with children, families and the interdisciplinary team:

'We started to pick up the slack from other services, because we were on the frontline, we were back in the schools, we were available. CAMHS were not, their doors were shut. The GPs [general practitioners] were not, their doors were shut... People couldn't access any other services, so started to come to school nurses, which we took on, because that's what we do.' (P14)

One school nurse summed this up in the following statement:

'We're on the map, it has put school nursing in [county] on the map, this COVID pandemic. Schools know who we are, because we've been contactable throughout the 2 years, and we have a lot more channels to be contactable now.' (P16)

However, this positivity was not universally felt; some spoke passionately of the invisibility of their work specifically within the public arena:

'Seeing in the media constantly [that] nobody's caring about vulnerable children, and you are like, I did three home visits yesterday and then attended four virtual meetings and was working till nine o'clock to make sure that I was able to document all of the stuff that I'd done... That was difficult because it really felt like we didn't exist. Like nobody actually realised how many school nurses are out there, what we're doing, what was actually available, what was trying to be done... You're like, I'm literally slogging my guts out to make sure that the children are seen.' (P19)

Discussion

The school nurses' accounts spoke to the universality

and versatility of what school nurses offer and how their services can be delivered. Many strategies utilised by school nurses during the pandemic were driven by necessity, but participants indicated that some are likely to endure post-pandemic due to their benefits. For example, moving logistical processes online has created digital data that could be used to monitor changing demands on the school nurse service, and is growing evidence to underpin responsive commissioning. There was variability in school nurses' reporting of the usefulness of different methods used to engage with children. Participants described a diversity in children's needs and whilst these modes enabled ongoing contact not all facilitated optimum care. The school nurses were clear that in-person contact was essential for effective assessment and intervention. As digital health is increasingly being used across services this insight is vital for responsive service commissioning (SAPHNA, 2021).

Our findings reflect evidence that COVID-19 exacerbated many children's pre-existing vulnerabilities or led to new challenges (OECD, 2020; The Children's Society, 2020). Currently, school nurses are responding to a post-pandemic rise in health issues. This poses a challenge for school nurses, many of whom are working within depleted and already exhausted teams. Staffing issues were highlighted before the pandemic (Littler, 2019), with school nurse numbers reduced by around 30% between 2010 and 2021 across the UK (NHS Workforce Statistics, 2021). The Healthy Child Programme explicitly sets out the need for a 'robust workforce plan' in its 0–19 commissioning guidance (Public Health England, 2021a), yet our findings suggest that inherent systemic, pandemic- and commissioning-related issues are a barrier to the recruitment and retention of school nurses. Service delivery relies on adequate staffing and funding, both of which appear to be variable at best, and deteriorating at worst. Promisingly, professional groups such as the Local Government Association (LGA) have proposed funding to commission a school nurse for each secondary school, while emphasising workforce planning to address staffing issues (LGA, 2022). It is also clear that the school nurse workforce is currently exhausted, and our findings point to the need for restorative work. The restorative practice model has been shown to improve nurses' coping in the context of COVID-19 (Griffiths, 2022). A government-funded programme of restorative work would likely be of great benefit to staff and organisations.

School nurses deliver effective care through interdisciplinary working, yet within this, a lack of clarity about the scope of the school nurses' public health role prevails (Reuterswärd and Hylander, 2017). In the UK, there are no school nurse thresholds for referral or boundaries for discharge, as with other specialist services, leaving many school nurses with large and complex caseloads. This is a strength of the service with regard to accessibility and provision of timely support. However, as demands on the service continue in the wake of COVID-19, we argue that there is a need for guidance

KEY POINTS

- Virtual modes, accelerated or introduced to facilitate contact with children during the pandemic, should be employed with care to enhance, rather than replace, in-person school nurse practice.
- A move to digital processes represents growing datasets of robust quantitative and qualitative evidence to inform commissioners and policymakers regarding trends in school nurse caseloads.
- School nurses' accounts highlight the need for a programme of restorative work that acknowledges the workload, pressures and emotional impact on the workforce during COVID-19, and offer an opportunity to debrief, reflect, and consider ongoing challenges.
- As school nurses' caseloads increased in number and complexity as a result of COVID-19 challenges, clear leadership is needed regarding the boundaries of practice within this specialist public health role.
- The increased recognition of the school nurse role during the pandemic must be maintained through embedding in national policy and commissioning directives.

FURTHER INFORMATION

School nursing in the time of COVID

Find more information on the study's website, visit: <https://sites.google.com/brookes.ac.uk/schoolnursinginthetimeofcovid>

to clarify the scope and boundaries of the school nurse role. Important at a commissioning level and for partner organisations regarding what the school health service can realistically provide, it would also authorise school nurses to shape and set boundaries within their practice by outlining their specialised role.

Finally, the school nurses spoke of a temporary elevation in their professional profile through new ways of working during the pandemic, and expressed a desire to capitalise on this. Recent work seeks to explain and exemplify the school nurse reach and role, both within the school setting and wider school community (LGA, 2022). One model that might be helpful in maintaining this raised profile is the provision of 0–19 services where services provided by health visitors and school nurses are aligned in a childhood approach. Yet within this, it must be recognised that school nurses and health visitors fulfil two very distinct roles with different skillsets. As part of the review of Specialist Community and Public Health Nursing standards, the Nursing and Midwifery Council (NMC), together with key stakeholders, is working to further establish the title of school nurse. Once the NMC validated foundation has been clarified and assured, a campaign to raise the profile of school nurses might be beneficial through a key stakeholder alliance.

Recommendations

- Recognise the importance of in-person contact with children and families. Virtual modes should be

employed with care to enhance school nurse practice where applicable.

- Implement systemic support for school nurses in data gathering and audit; building robust quantitative and qualitative evidence to inform commissioners and policymakers regarding trends in school nurse caseloads.
- Clear leadership and advocacy regarding the boundaries of school nurse practice, responsive to the evolving intersections of school nurses' work with other services.
- A programme of restorative work with the school nurse workforce to acknowledge the workload, pressures and emotional impact during COVID-19, offering an opportunity to debrief, reflect, and consider ongoing challenges.

Strengths and limitations

We set out to explore the experiences of UK-based school nurses. Respondents mainly came from England, and participants in other areas of the UK may have reported different experiences. There was a large difference between the number of expressions of interest and the final sample. This is likely due to the high demands on school nurse time. Nevertheless the final number was commensurate with qualitative sample sizes and provided a rich data set. Our sample only included school nurses working in mainstream schools and those in special schools were not represented. However, the diversity of our sample in terms of experience, role, type of school, and ages of children worked with, ensures we have captured a range of perspectives. The virtual nature of data collection in this study may have impacted the quality of interactions between researchers and participants. However, this approach was key to reaching participants across the country, offering a convenient option for practitioners. The unexpected mix of one-to-one interviews and focus groups gave both depth of reflection in individual interviews and rich discursive interaction in focus groups; this served to enhance the findings within this study. The aim and design of our study may limit the transferability of findings to international contexts, though it is likely that our findings will have relevance for countries with similar school health models.

Conclusions

As public health specialists, school nurses described how they stepped into service provision during COVID-19, responding to unprecedented impacts on children's health and wellbeing. An array of new practices were adopted to facilitate delivery, and these open up ongoing possibilities to complement in-person practice going forward. Surging referrals, combined with the inability of many specialist services to see children, left school nurses holding large caseloads of children with complex needs. This occurred within an already depleted workforce further strained by

the impact of the pandemic. Through proactive response during the pandemic, many participants reported a temporary improved recognition of their role with the interdisciplinary team. However, this has since waned, leaving them exhausted and disheartened. This paper therefore makes a point of not making any additional practice recommendations for school nurses. Instead, attention is drawn to what is needed at an organisational level to support school nursing teams in their vital public health role. School nurses were centred as public health experts during the pandemic; there needs to be a coordinated approach to ensure continued recognition of, and provision for, school nurses' specialist public health role in future commissioning and policy considerations.

CHHE

Conflict of interest: None declared

Funding: The authors would like to thank the General Nursing Council for England and Wales Trust for funding the study.

Acknowledgements: The authors would also like to thank the advisory panel comprising; Sharon White, OBE, Chief Executive Officer SAPHNA; Ethel Rodrigues, Lead Professional Officer (Education) and Ireland, Unite the Union; Simone Storer-Wharton, School Nurse, SCPHN Oxford Brookes; Jessica Adkins, parent, lay member for their input into the design, conduct and finalising of the review.

Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res Psychol.* 2006 Jan;3(2):77–101. doi:org/10.1191/1478088706qp063oa

Braun V, Clarke V. Reflecting on reflexive thematic analysis. *Qual Res Sport Exerc Health.* 2019 Aug 08;11(4):589–597. doi:10.1080/2159676X.2019.1628806

Cook G, Appleton JV, Bekaert S, Harrold T, Taylor J, Sammut D. School nursing: New ways of working with children and young people during the Covid-19 pandemic: A scoping review. *J Adv Nurs.* 2023;79(2):471–501. doi:10.1111/jan.15504

Griffiths K. Using restorative supervision to help nurses during the Covid-19 pandemic. *Nurs Times.* 2022;118(3) [cited 2023 Feb] <https://www.nursingtimes.net/roles/newly-qualified-nurses-using-restorative-supervision-to-help-nurses-during-the-covid-19-pandemic-14-02-2022/>

Kelly LM, Cordeiro M. Three principles of pragmatism for research on organizational processes. *Methodological innovations* 2020;13(2):2059799120937242.

Local Government Association. What is the role of a school nurse? 2022. Online. Available at <https://www.local.gov.uk/publications/what-role-school-nurse> (Accessed 18th October 2022)

Little N. A qualitative study exploring school nurses' experiences of safeguarding adolescents. *British Journal of School Nursing.* 2019 May 02;14(4):169–176. doi: 10.12968/bjsn.2019.14.4.169

Morris J, Fisher E. Growing problems, in depth: The impact of COVID-19 on health care for children and young people in England. *Quality Watch briefing.* 2022. Online. Available at <https://www.nuffieldtrust.org.uk/resource/growing-problems-in-detail-covid-19-s-impact-on-health-care-for-children-and-young-people-in-england> (Accessed 18th October 2022)

Morgan DL. Pragmatism as a paradigm for social research. *Qual Inq.* 2014 Oct;20(8):1045–1053. doi: 10.1177/10778004135137

NHS Workforce Statistics. June 2021 Staff group, care setting and level. 2021. Online. Available at <https://digital.nhs.uk/data-and-information/publications/statistical/nhs-workforce-statistics/june->

2021#chapter-index. (Accessed 18th October 2022)

OECD. Combatting COVID-19's effect on children. 2020. Available at <https://www.oecd.org/coronavirus/policy-responses/combatting-covid-19-s-effect-on-children-2e1f3b2f/>. (Accessed 18th October 2022)

Patton M. *Qualitative Research and Evaluation Methods* (4th edn.) 2005. Los Angeles CA: SAGE.

Public Health England. Guidance to support the commissioning of the healthy child programme 0 to 19: health visitor and school nurse (commissioning guide 1). 2021a. Available at <https://www.gov.uk/government/publications/healthy-child-programme-0-to-19-healthVisitor-and-school-nurse-commissioning>. PHE publications gateway number: GW-1891. (Accessed 18th October 2022)

Reuterswärd M, Hylander I. Shared responsibility: school nurses' experience of collaborating in school-based interprofessional teams. *Scandinavian Journal of Caring Sciences.* 2017;31(2):253–262. doi: 10.1111/scs.12337.

Sammut D, Cook G, Taylor J, Harrold T, Appleton J, Bekaert S. School Nurse Perspectives of Working with Children and Young People in the United Kingdom during the COVID-19 Pandemic: An Online Survey Study. *Int J Environ Res Public Health.* 2022;20(1):481. Published 2022 Dec 28. doi:10.3390/ijerph20010481

School and Public Health Nurses Association. School Nursing: Creating a healthy world in which children can thrive. A Service Fit for the Future. 2021. Available at <https://saphna.co/news/saphna-vision-for-school-nursing-successfully-launched/>. (Accessed 18th October 2022)

The Children's Society. Impact of COVID-19 on young people (briefing). 2020. Available at <https://www.childrenssociety.org.uk/information/professionals/resources/impact-of-covid-19-on-young-people> (Accessed 18th October 2022)

Wheeler BA. A new way forward: A look at one school nursing team's innovative service model. *British Journal of School Nursing* 2017;12(9):452 doi: 10.12968/bjsn.2017.12.9.452

Focus group/interview guide

1. Can you tell me about the different modes of delivery used with children, young people and families that evolved as a result of COVID-19 restrictions?

(prompt – what methods did you use, how did this change from pre-pandemic use of different modes of delivery, do you have a specific example of something that worked well or that was challenging?)

2. How did the COVID-19 restrictions affect your ability to support vulnerable children, young people and their families, Children in Need and those on the child protection register?

(prompt – while maintaining confidentiality can you give any examples of any specific successes or challenges in working with vulnerable children and families?)

3. School nurses work with a range of professionals (e.g. with education, social care, community health services, emergency departments, sexual health services, child and adolescent mental health services, community children's nursing teams, police services, substance misuse services, etc.) – can you describe the impact of COVID-19 on these partnerships?

(prompt – frequency, mode, successes, challenges)

4. Do you think you will carry on beyond the pandemic with any new ways of working with children, families and professionals that accelerated or emerged during lockdown and restricted access?

(prompt – can you give any examples, will there be any organisational barriers/challenges to carrying on with using these methods?)

Appendix 1. Focus group/interview guide