Final warning on the need for integrated care systems in acute paediatrics

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The term 'acute' is not synonymous with emergency but this better describes the needs of the 4.42 million children[1] (age 0–14 years) who presented to emergency departments in 2017–2018. This huge expansion of 'emergency' presentations has taken place relatively quickly (in 2008–2009 there were 2.66 million) and has challenged traditional paediatric services. A decade ago, an unwell child would have presented to their general practitioner (GP) and if necessary referred to see a general paediatrician on an 'acute' take. Pathways to emergency care are now much more plentiful, reflecting attempts to both mitigate demand on emergency departments and the emphasis on patient choice in health policy. Attendances for children (age 0–14 years) have remained at about 20% of all emergency presentations for over a decade[1]; however, short stay admission (less than 24 hours) is becoming the predominant outcome for most referrals.[2] While new pathways into the system have opened up (telephone services, urgent care hubs, etc), this has led to regional variation and confusion for parents.[3] We still have old models of professional hierarchies which gate-keep access to secondary care and are often dependent on writing letters (although electronically) with little or no focus on prevention. This negates an important continuum emphasised as early as the 1920 Dawson Report (figure 1) and continues to still present a challenge to policymakers today.

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The reasons for these deficits in continuity and comprehensiveness are multifactorial. Certainly, it is likely the UK 2004 General Medical Services contract, which changed out of hours provision, affected care for children along with changing societal expectations in relation to managing simple illness. However, it is also the case that paediatricians have been slow to adapt to the ever-increasing demand for specialist input, advice and/or guidance. There are fewer true emergencies in healthy children due to decreases in vaccine-preventable infections, however the prevalence of children with neurodisability, chronic disease and mental health disorders has risen. In particular, greater numbers of children with complex conditions present specific challenges such as tracheostomies, indwelling vascular lines or specific requirements for metabolic support. While health policy has focused greatly on adults with multiple comorbidities, children also have multimorbidities, coexisting physical and mental health problems, and social vulnerability. Child poverty and inequity are important dimensions as social determinants of ill health that also affect patterns of care-seeking behaviour, hinder development and diminish life chances. Over recent years, child poverty has been worsening, such that infant mortality is now rising and affecting the poorest children most. A decade of austerity economics followed by a prolonged pandemic with further economic hardships will further worsen child poverty and inequalities and inevitably child health.

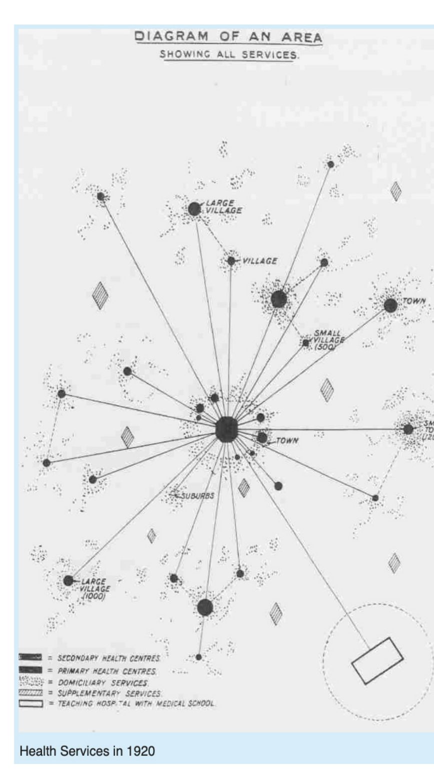

Figure 1 Extract from the Dawson Report, courtesy of King's Fund.

There is now a critical issue coming to a head paradoxically because of reduced emergency attendances among children during the peaks of the COVID-19 pandemic. Once the pandemic is brought under control, the rising trends of emergency health service use among children will almost certainly re-emerge and have already been demonstrated to be occurring for respiratory illnesses.[4] With the addition of huge pressures on children's mental health services, together with rises in child poverty, these factors combine to produce conditions for a perfect storm; uncontrolled increases in emergency hospital demand among children who are facing greater challenges to their health and well-being as their social circumstances and family lives are increasingly disadvantaged.

TOWARDS A SOLUTION

In order to address the challenges of unsustainable demand for urgent healthcare, a new approach is needed. The term integrated care is often used to describe a system in which there is less linearity and more parallel thinking to service provision. The National Health Service (NHS) Long Term Plan called for the creation of integrated care systems (ICSs) in 2018. These are defined as: 'new partnerships between the organisations that meet health and care needs across an area, to coordinate services and to plan in a way that improves population health and reduces inequalities between different groups'.[5] In essence, they bring together not only healthcare services but local councils and other important strategic partners such as the voluntary, community and social enterprise sector. All parts of England should be served by an ICS by April 2021 but the specific offer for children is far from clear. Box 1 highlights some potential components of an ICS for emergency and acute care needs.

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Box 1 Components of an integrated care system for children with emergency and acute care needs

- Connections and relationships are the focus. Services can be minimally changed, while their capability and capacity are maximised.
- General practitioner practices are the centre of new care models with specialist services drawn out of the hospital to provide support and to help connect services across all of health, social care and education.
- The whole population is included (using segmentation to create bundles of care) to drive prevention and improve equity.
- Peer-to-peer support is used to improve health-seeking behaviours.
- New approaches to care are co-designed with children, young people, parents, carers and communities, and outcomes that matter prioritised.
- Education and development include the multiprofessional team, as a key way to build relationships and find new ways to work together.

To develop functional ICSs for children to assist with the demand for acute and urgent care, we would argue three core principles will be needed:

Principle 1: Models of care shaped around need rather than demand

Services of the future must be based around the needs of the population, using different sizes of 'place': (1) the GP practice population, (2) the local authority/borough and (3) sector-wide ICSs. The NHS's emerging Primary Care Networks, with 30 000–70 000 population (approximately 6000–15 000 children), provide an important opportunity to support the whole population of children, not just those children who fit within predefined care pathways. Linked, and better quality, data sets will provide better information to take into account the wider determinants of physical AND mental health, across the life course, from the maternal–newborn continuum, through to young people transitioning to adult life.[6]

Children and young people with long-term conditions need confidence and resilience in self management; healthcare delivered by peer support (including group consultations[7]) and health promotion by webinar (eg, to address fears about immunisation) could harness support and improve understanding of how best to use healthcare resources. However, it will be important to demonstrate that services built around pooled resources rather than competitive tendering can indeed reduce children and young person's use of emergency care. By bringing social care into the service, and leveraging the impact of local voluntary services, this creates a genuine ICS (the one we have, the NHS, but now integrated with social care, local communities and the third sector, too).

Principle 2: Co-production

Co-production must become a key part of the method for service design and continuous improvement. Quality improvement expertise and co-production with patients and citizens built into the model (eg, https://www.altogetherbetter.org.uk/) will enable continuous, iterative feedback and adaptation. By using patient and family insights, we will have a system that is actually fit for purpose; that helps families use emergency care when it is genuinely needed and empowers self-management effectively. The Wheeze & Me initiative showed how multiple health contacts left parents feeling confused, scared and ill-informed.[8] Instead, parents will be given knowledge and training to be equal partners in healthcare delivery.

When parents, young adults and local advocates across an ICS were recently asked 'What Matters?' in health and well-being for children and young people, six themes emerged: access to mental health support; mental health support in schools; navigating the system; young people's ownership of their healthcare; pressures on parents and maintaining a healthy weight.

Principle 3: Learning systems

Truly, integrated services require the use of longitudinal and broad (ie, involving education, social care, family) data and analytics.[9] Importantly, it is really a combination of afferent input (data) leading to an efferent (decision) outcome in that just collecting data and not considering operation and strategic utilisation will not benefit children and young people. These data will underpin population-based health and the co-produced care described above. Data need to be presented iteratively to frontline staff so that a more adaptable learning system approach to care results and establishes mechanisms for future improvement. This will also ensure against us falling behind on newly required models of care in the future such as increasing mental health presentations to emergency departments by children and young people with no physical need. We need robust data to shine a spotlight on a health problem and drive long-term preventative thinking and action.

CONCLUSION

The need to deliver a collaborative healthcare delivery model at a population level and the expansion of children presenting to emergency departments provides a powerful incentive for change. In the aftermath of the pandemic, the child health community should grab the opportunity and work with their local communities and ICSs towards co-producing solutions.

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