Modelling the Future III

Safe and sustainable integrated health services for infants, children and young people

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Executive summary

Safe and sustainable integrated health services for infants, children and young people is the final part of a series of publications by the RCPCH which examine the future of children's health services in the UK. The aim of this paper is to describe a practical implementation strategy for the reconfiguration and improvement of children's health services, making recommendations at national, regional and local levels.

The first paper, *A consultation paper on the future of children's health services* (2007), outlined a model for high quality services for children, proposing a range of service options and how these might be implemented locally. Consultation with paediatricians across the UK indicated broad support for the principles behind the design of future services and the models proposed. The second paper, *Reconfiguration and workforce estimates* (2008), described the current workforce, the present configuration of services and examined all the options to create safe and effective services with a sustainable medical workforce. The conclusion was that the number of inpatient units needed to decrease, the number of career grade paediatricians needed to increase, coupled with less reliance on trainees for service delivery in the longer-term.

Why is change needed?

Children's health services are not currently meeting the needs of children and their families in the best possible way. Three prime drivers for change are:

• **Changing epidemiology of conditions in childhood**. The new morbidity arising from changes in society and lifestyles requires a new health service delivery model. Unlike the management of infectious diseases or trauma, which can be delivered in hospital settings, the emerging morbidities and complex long-term conditions require the collective competence of a community-based, multidisciplinary, children's team.

• **Fragmentation of services and systems**. Children's health care crosses many organisational and professional boundaries, particularly for vulnerable children, and all those with long term conditions or complex health needs. Recent policy developments based on market principles and targets have at times discouraged joint working, to the detriment of the care of children.

• **Workforce imbalance**. To ensure WTD compliance more doctors are required to fill middle grade rotas. However, if there are too many doctors in training this creates an imbalance with the numbers of available consultant posts. This problem needs to be considered in relation to the changing roles of other professional groups who contribute to the workforce, the changing epidemiology of conditions and the future configuration of services.

Solutions

Three components need to be combined to achieve meaningful change:

1. Systems alignment

Good outcomes children are dependent on all the parts of their service being in place and working well together. It is proposed that future services should be designed around patient journeys, grouped together into pathways that children and families take and delivered by teams. These teams work in networks that all share the same purpose, values and practice to create a seamless service. These principle holds true across all public-sector organisations and any private or third sector/social enterprise organisations that may contribute components of the pathways in the future.

To guarantee such an integrated service, *commissioners* within health, education and social care will increasingly be expected to pool budgets and work together within joint commissioning arrangements. *Providers* of services should work collaboratively in a network to ensure all the component parts of the pathways are integrated. *Regulators* should likewise work together with their respective improvement agencies to examine a network, pathway or programme of care, rather than simply inspect organisations or professional groups, and then facilitate improvements at a local level.

2. Medical workforce planning

The short-term options for creating a sustainable medical workforce are limited and challenging. *Modelling the Future II* (2008) concluded that the most viable option is consultant expansion, accompanied by the redesign of services in order to reduce the dependence on trainees for acute service provision. This will result in acute care increasingly being a consultant delivered service, particularly in smaller services which are close to larger inpatient units.

It is recognised that consultant roles and responsibilities are likely to evolve throughout an individual's career. Therefore opportunities for further training should be promoted. Also, the non-clinical component of consultants' job plans must be supported, with appropriate training programmes to develop their leadership, education, management and improvement roles.

To ensure that the future medical workforce is competent and sustainable, the roles of other child health practitioners should be reviewed in the light of current workforce challenges. Commissioning for workforce development must be integrated with commissioning for services to ensure the right numbers of people, with the right competencies, are available for the new models of working in the future.

3. Quality improvement

Improving outcomes and experience of services is of the highest priority. Quality accounts should demonstrate where children's health services are working well and where they need improvement. Different measures will be needed at NHS Trust Board, PCT and SHA levels, and the individual reports will need to complement one another to demonstrate how all the components of pathways are working across the whole network. The concept of quality accounts is equally appropriate for Children's Trusts and local authority children's services. Improved assurance or governance arrangements should drive continuous quality improvement, which must become integral to the day-to-day delivery of services. Clinical leadership and engagement are crucial here; paediatricians will need to support, where appropriate, large scale reconfiguration of clinical services and be committed to small-scale improvements in every day clinical practice within their teams.

What needs to happen within networks?

The application of the proposed solutions will produce different service structures across the UK,

depending on the size and geographical location, local demographics and workforce availability

within the service. Networks will span different sized units; it is essential that they work

cooperatively to deliver better outcomes. Overall success will depend on reducing the number of

inpatient units, whilst improving local urgent and emergency care systems. This must go with the

development of community children's teams integrating professionals from different professional

groups and organisations.

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- In smaller and more remote units paediatricians will need a broad range of skills to cover the spectrum of acute and long-term care, with more specialist care for children being provided by visiting specialists, or through children travelling to the specialist. Maternity care will need to be supported by a neonatal service that can safely resuscitate, stabilise and manage common problems with support from within the network with the sickest babies transferred to a suitable unit within the network.
- Services in smaller units close to larger ones which are able to expand their acute capacity should be remodelled: the aim being high-quality urgent care provision in the smaller unit based around the emergency department, supported by a short stay paediatric assessment unit (without inpatient beds), with inpatient expansion in the companion larger unit, and better transport systems. A co-located midwifery-led unit on the smaller site will need to have robust systems to manage the unexpectedly unwell infant.

- Medium-sized units will continue to manage the majority of acute and long-term conditions occurring within the population they cover. However, there will be greater differentiation of consultant roles: while some may retain more generic roles, others may develop more specialist roles in community settings. These units will have inpatient beds with HDU capacity, a neonatal unit and integrated community children's teams.
- Larger centres will be the nucleus for specialist provision. Like mediumsized units they will have the capacity to provide the majority of care for their local populations. The acute service will need to be less dependent on specialists for their day-to-day running than in the current system. Due to their size the majority will have an independent children's emergency department, a level 3 neonatal intensive care unit, and a PICU. However, not all will have the capacity for complex paediatric surgery; this will need to be co-located in fewer specialist centres.

Public health networks

Robust public health programmes are essential to improve the health of communities, the immediate priorities are reducing poverty and inequalities in health outcomes, reversing the trend toward obesity, improving child mental health and well-being, reducing injuries and reducing global climate change. Although universally acknowledged as important, such programmes are often extremely difficult to implement and evaluate locally.

Every opportunity needs to be taken to implement cost-effective public health strategies. The public health capacity within local authority and health services has to be increased, then public and private sectors engaged in delivering healthcare need to use resources wisely and prevent harmful environmental or social impacts from the provision of services.

High priority should be given to protecting the health of the most vulnerable in society, especially in times of economic recession or limited resources, through the redistribution of wealth and specific programmes targeted the most needy, for example the Family Nurse Partnership Programme, or programmes to reduce inequalities in infant mortality.

The Government's declared policy is to make the UK the world's best place for children to grow up in and the consequent benefit, from a health service perspective, is that healthy children should use fewer NHS resources throughout their adult lives.

Maternity and newborn networks

A healthy start to life is essential. This depends on accessible family planning, good maternal health, a stable parental relationship and excellent antenatal care, especially for women at risk of poor outcomes.

The recent Neonatal Taskforce Review encourages the creation of clinical and commissioning networks for maternity and newborn services. Each SHA will need to review the distribution and capacity of the three tiers of neonatal care within their region. Paediatric services must aim to avoid the high-risk neonate being delivered in a low-risk unit.

The importance of ensuring that maternity networks map onto neonatal networks cannot be overstated. In future, it is unlikely that a 24/7 acute paediatric service will exist on all current or proposed sites for maternity units; alternative ways of providing neonatal resuscitation and immediate neonatal care have to be developed for hospitals without a 24/7 on-site paediatric service. The roles and career pathways of neonatal staff, particularly neonatal nurse practitioners, need to be developed, with clear plans for recruitment, training and retention of all staff in each SHA. A networked approach should enable the same quality of care to be delivered in all units, so that survivors of level 3 intensive care can be returned to local units as soon as possible. Networks should enable shared training, standards and measures, and also permit staff to move around within the network to maintain their skills.

Urgent and emergency care networks

Urgent and emergency care is the backbone of a traditional paediatric service. It is essential that staff with appropriate skills are available 24/7 in every community to manage acute conditions – whether medical, surgical, or psychiatric. Out-of-hours urgent care services, emergency departments and acute assessment services, paediatric intensive care units and acute surgical specialties, should all be commissioned as an integrated network.

Local urgent care and emergency care for children should, wherever possible, be co-located so that children can be triaged to the most appropriate service on arrival at hospital. The provision of short-stay paediatric assessment units allows observation of children whose appropriate clinical management is uncertain, without having to resort to hospital admission. Such units, accompanied by access to senior medical opinions early in the child's care journey, should enable substantially fewer hospital inpatient admissions. Such reductions could enable the reconfiguration of small and medium units near one another, avoiding the need for two acute middle grade rotas so contributing to the creation of a sustainable medical workforce.

Child mental health and psychological wellbeing network

Child mental health services involve more than just child and adolescent mental health services. The contributions of primary care, community child health, behaviour support services provided by education, and of youth offending teams should be integrated into a comprehensive child mental health service. A major part of the service should be delivered locally but there should be access to specialist, forensic, or residential services as required. For common conditions such as conduct disorders, self harm, ADHD, autistic spectrum disorders, anxiety and depression, there should be clear local pathways agreed between local providers. Pathway approaches for these teams could help clarify who is responsible for which components of a pathway. Subsequently local workforce planning should create a children's mental health workforce that can deliver the service specification and outcomes agreed between commissioners and providers.

Provision of inpatient mental health services is often inadequate; the relationship between secure educational provision, social care provision and provision within the criminal justice system is often unclear. This issue needs to be addressed so that emotionally immature young people with learning difficulties do not find themselves unnecessarily within the criminal justice system.

Long-term condition networks

The model of service delivery for long-term conditions should be largely community based, meaning delivery at home, in schools, or in other local settings, with hospital-based reviews or interventions only when necessary. There is an emerging model of multidisciplinary teams for children with complex continuing health care needs and those requiring palliative care. The model's advantage is that it creates a 'team around the family' which considers the consequences of a condition for the family, as well as its impact on the child.

The lead professional will often be a children's nurse, who ensures completion of a comprehensive assessment of family needs and a clear care plan with access to a range of services. This model of the integrated team working with a lead professional across traditional boundaries is not only more cost efficient than current approaches, but also provides a better patient experience by reducing the number of unnecessary interagency assessments and appointments.

There is a shortage of suitably qualified community children's nurses; but there is a potential opportunity to reinvest skilled nursing time into communitybased nursing teams if inpatient admissions can be reduced. Access to training is often the limiting factor in creating community based children's teams, so there needs to be an explicit link between the planning of services for the future and the commissioning of training programmes to enable delivery of future models.

Vulnerable children's network

Vulnerable children are, by definition, at high risk of a wide range of health problems, and subsequently have poorer outcomes than other groups in society. Many vulnerable children go unrecognised, with only those in contact with safeguarding services, looked after children services, and those involved in the criminal justice system accessing a dedicated service. Whether or not to investigate following initial concerns of child abuse or mistreatment, to intervene following an initial assessment, and to remove a child from his or her biological family are some of the most difficult decisions within children's services. The process of decision making requires full participation of all professional groups and organisations involved, and exemplifies the need for working with families and accountability between agencies.

The vulnerable children's network needs to integrate the services for recognised vulnerable groups, services for children and young people in need of safeguarding, looked after children services and those excluded from school or in contact with the criminal justice system.

The development of a local child protection network within the health service would enable specialist child protection opinions to be more readily available when required.

Specialist service networks

The commissioning of specialist services requires development of managed networks to make clear who is responsible for each component of the service and where it is delivered. There is real potential to develop greater outreach services staffed by paediatric consultants and specialist nurses, who will work closely with their colleagues in local community-based teams.

Specialist services should be designed to be accessible as close to home as safety and sustainability allows; however some specialist services do need to be co-located together in fewer specialist centres. On-call specialists need to be readily available to enable local paediatricians to have access to expert opinion when required. This may mean developing telemedicine facilities across wider geographical areas.

Complex surgical procedures are best undertaken where there are co-located support services, and sufficient numbers of children to maintain the competence of individuals and teams undertaking these complex procedures. Specialist commissioners, working closely with specialist service providers, need to implement the recommendations of the recent Department of Health report on commissioning safe and sustainable paediatric services.

Who needs to make what happen?

For health services to realign, redesign and continually improve, concerted effort is called for at a national level, by government departments, professional organisations and other regulatory agencies; in England at a regional level by Regional Government Offices and SHAs; and at a local level by the commissioners of services, provider trusts, clinicians and families.

Nationally

Government departments must support the re-provision of local services particularly remodelling adjacent inpatient units, centralising specialised services onto fewer sites, and delivering non-acute children's health services in community settings such as children's centres and extended schools. Governments across the UK should clarify structures so that the commissioners of children's services from different agencies are aligned and have common goals, values and methods of working with their respective providers. Furthermore, government departments in England should agree the role and expectations of Children's Trusts, including whether they are commissioner or provider organisations and how they are held to account locally and nationally.

The Department of Health (DH) workforce team needs to urgently review its workforce models and predictions in the light of *Modelling the Future* and the recent announcement by the DH of additional funding for consultant expansion. There should be greater integration between workforce planning for doctors, nurses and allied health professionals, particularly as these roles evolve with the development of multidisciplinary community teams.

To improve quality and outcomes, regulatory agencies have an important responsibility to assist in setting standards, developing measures and inspecting services. Given the multi agency nature of services for children and families, the various regulatory agencies and improvement organisations need to share a common approach based on networks, complementing their traditional approaches based on organisational or professional groups.

Professional organisations have a responsibility to ensure the clinicians they train and assess are fit for future and prepared for new ways of working. Such organisations need to work together to provide clear leadership on the future configuration of services, influence government and regulators, develop better understanding of future workforce needs and ensure members have practical support to improve their services.

Regionally

Regional Government Offices (RGOs) have a significant role to play in the formulation of regional planning policy, as they form an interface between national policies and practice at a local level and between the public and private sectors. RGOs also have an important public health function to ensure present and future plans meet the needs of children and families, particularly in terms of employment opportunities and affordable housing and leading the sustainable development agenda.

Strategic Health Authorities (SHAs) need to create a clear strategy for the NHS that meets the needs of their populations using their post-NHS Review implementation groups. They should lead the process of strategic planning and managing the performance of the various commissioning and provider organisations within their geographical boundaries. They should set the

priorities for the development of quality accounts with their local trusts, focusing on services where it is known that the quality of care is less than optimal. Furthermore SHAs have an important role in supporting the creation of managed networks commissioned, provided and improved as comprehensive "whole systems". Because of the vested interests of local trusts and PCTs, it is SHAs that must lead in creating reconfiguration plans to co-locate specialist services, improve local access, and enable remodelling of local acute services. SHAs are well placed to develop a sustainable workforce strategy complementing their service development plans for the future. These estimates then need to be combined at a national level to ensure the right recruitment and training programmes are in place.

Locally

Commissioners have the responsibility to distribute resources to achieve the best outcomes for the population they serve. Commissioners of children's services within health and from various agencies should be aligned and have the same goals, values and methods of working with their respective providers. They should work in partnership with provider organisations and teams to adopt 'whole system approaches' to improving services, being explicit about the improvements they commission and the development of the metrics for quality accounts.

Provider organisations must ensure that their services or teams are delivering the very best care, by ensuring the competence of teams, by creating regular and meaningful feedback and by supporting practical strategies for quality improvement. They have a responsibility to work together to create seamless care, within and between organisations. They should explore the benefits of integrated management structures to bring teams together.

It is important that clinicians recognise the implications of the changing epidemiology of disease for their clinical practice, and the changing roles of professional groups within the healthcare system. Clinicians' need to maintain their personal competence through revalidation which must be seen as an opportunity to simultaneously improve personal practice and improve the service they deliver. Service leaders need to ensure their teams are supported by the best evidence translated into protocols, that these protocols are being used, and have the intended impact on quality of care.

Parents, children and young people have a responsibility to protect and promote their own health by adopting healthy lifestyles, avoiding potential hazards, using universal services and taking appropriate action if they become unwell. When a child is sick or has any long-term condition, patients and carers should expect high quality, well-coordinated care, in which they are full partners in the decisions made. They should have information about local services and support groups, and should expect to become experts their child's condition.

Next Steps

Individuals and organisations responsible for the future development of children's services need to learn from the past, but look to the future. Children's services should be seen as whole systems, designed on a foundation of pathways and networks enabling the right things to be done at the right time and place, developing competent teams working together within a managed network to achieve the best experience and outcomes. The proposed transformation must start immediately, first reaching a consensus on a local service delivery model, which then informs future workforce commissioning plans.

The RCPCH recognises this transformation will not happen overnight, but will lead, facilitate and support change that leads to an improvement in all organisations that contribute to the health of children. To help paediatricians, children's teams and other organisations, the RCPCH intends to apply the principles behind this document to inform future projects such as the development of networks, urgent and emergency care services, specialty services, the development of quality metrics and to support improvements throughout all health services for children and young people.

The RCPCH will continue to work with other professional bodies, government departments and patient organisations to embed a whole systems approach to the development of better services for children and families. Only through widespread active collaboration, driven by a real desire to continually improve will we achieve better health of future generations of children and young people.