

# Lessons learnt (so far) from establishing models of integrated clinical care for children and young people

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Children's health needs are changing. Today, infectious diseases cause less morbidity, children are living with complex conditions, and social determinants of health play an ever greater role. Parent health seeking behaviour is changing, leading to less self-care and increased presentation to health professionals. These changes are placing an ever-increasing demand on primary and secondary healthcare. This pressure can be seen in waiting times for children to be seen in clinic; in England, over 400 000 children are on a waiting list, while in Northern Ireland, over 5000 children have been waiting for more than 1 year.<sup>1</sup> Scheduled paediatric care in the outpatient department is close to failing our children (if it has not already failed).

The traditional scheduled care model involves a referral from primary care to secondary care—the patient is seen in due course, usually on a hospital site. In this simple pathway, no intervention is made before the child is seen, meaning that symptoms remain untreated and concern accumulates until the appointment. The pathway is restricted to healthcare and does not consider education, public health, social care or the voluntary sector.

In recognition of the limitations of the traditional scheduled care model, new and integrated models of paediatric clinics are emerging across the UK (<https://www.cc4c.imperial.nhs.uk/our-experience/national-map>) and internationally. These new models connect hospital-based paediatric specialists with community-based primary care clinicians; some are multi-professionals and multi-agency—all work across primary and secondary care. They demonstrate efficient delivery of tangible benefits (up

to 40% reduction in scheduled specialist care) in addition to parent and GP satisfaction.<sup>2–7</sup> We describe three models in [box 1](#). Other UK and international models are described on the RCPCH website <https://qicentral.rcpch.ac.uk/resources/systems-of-care/integrated-care> and in published literature.

Here, we present tips and resources gained from over 25 years of collective experience with UK models of integrated child health.

## INITIATING THE MODEL

First, identify strong paediatric and GP leads; start in one area (eg, primary care network or GP cluster) and then spread. Choose somewhere with local enthusiasm. Involve teams of consultants and specialty and associate specialty doctors. Involve the wider child health team: community paediatricians, dietitians and pharmacists; health visitors and school nurses; mental health professionals, practice nurses and advanced nurse practitioners and paediatric and GP trainees. Be flexible: the first event can be either a multidisciplinary team (MDT) meeting or a clinic. While face-to-face consultations are preferable for initial clinical encounters, most follow-up can be over video link. The MDT should have a virtual link to improve accessibility.

## PRACTICAL CONSIDERATIONS

Agree who organises appointments (including follow-up). Secure equipment for clinics, for example, digital scales, otoscope, children's blood pressure cuffs.

When the specialist offers advice without seeing the patient, be transparent about clinical accountability; this remains with the professionals who bring cases for discussion. A written memorandum of understanding helps reassure all parties.

For clinics, a note of the consultation should be visible in both primary and secondary care records. If digital connections are difficult, a consultation note made in primary care records can be

emailed to the hospital for filing in the hospital notes.

For MDT meetings, allocate a chair who encourages professionals to bring cases for discussion rather than rely solely on GP referral for face-to-face clinics. As with any MDT, an ethos of inclusion, mutual understanding and learning is important.

When discussing cases at the MDT, clinicians need consent to share their patient's identity and access to the patient record. Without consent, this discussion can happen anonymously.

The GP and paediatrician reach a mutual decision, case by case, on who will organise next steps, such as tests. That person is responsible for following up on these—sometimes resulting in further case discussion between GP and paediatrician.

## ASSESSMENT OF THE MODEL

Secure support; check that primary and secondary care senior management are aware of the new model. Showcase local, national and international<sup>4</sup> evaluations to senior decision makers in clinical, management and financial roles, for example, Integrated Care Systems in England

Use quality improvement methodology to develop and spread the model, for example, <https://www.ihi.org/resources/Pages/HowtoImprove/default.aspx>

Quantitative outcomes include cost and time efficiencies (fewer hospital appointments, tests and treatment trials) and environmental impact (reduced travel). Qualitative outcomes include parent and clinician experience.

## KEEP GOING

Make building trust and relationships between professionals a top priority.

Grow the MDT—invite different specialists, for example, physiotherapy, safeguarding, oral health, early help (social care).

Rotate the GP practice sites for the face-to-face clinic if that suits the relevant GP hosts.

Use local data to extend the model beyond the early adopters; use peer-to-peer influence and presentations at meetings to heighten awareness. Alert colleagues in primary and secondary care to any evaluation. Engage with non-paediatric specialties to showcase the model; this might be relevant to their practice; others might already have an integrated model.

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## Box 1 Descriptions of three models of integrated care

**Model 1—Connecting Care for Children (CC4C)<sup>5</sup>**

Paediatric outpatient clinic time is re-purposed; each paediatrician supports a 'neighbourhood'—here meaning a group of GP practices—covering a population of 30 000–50 000. At a monthly multidisciplinary team (MDT) meeting, the paediatrician provides clinical advice for cases identified by those GP practices. Child health expertise is shared by the paediatrician, by the other GPs present and by colleagues from health visiting, school nursing, mental health, community dietetics, pharmacy and more. Most cases are managed through discussion and information sharing. Those few children who still need to see the paediatrician face-to-face are seen in the GP practice, alongside the GP, on the day of the monthly MDT meeting. The service is well received by families, much valued and enjoyed by the professionals and releases net additional capacity of 3–10% across outpatients, A&E attendance and hospital admissions.

**Model 2—Cluster Clinic<sup>6</sup>**

As with Model 1, a paediatrician (consultant or staff grade) is linked to a neighbourhood of GP practices (called a cluster in Scotland). What is different from Model 1 is that here, the paediatrician 'buddies up' with a local GP who has additional training in paediatrics (eg, Diploma in Child Health), with both clinicians working together as 'the paediatrician'. Referrals from the cluster are vetted by the paediatrician and sometimes by the GP. When paediatricians or GPs start vetting, an experienced colleague spends time discussing clinical and practical issues arising. At the vetting stage, advice is given to parents and to the referring clinicians instead, or in advance, of an appointment being offered. Approximately 15% fewer patients are offered appointments in this model compared with the traditional model and with no evidence of increased re-referrals or diagnoses being missed. For appointments, children are seen in a community face-to-face setting by either paediatrician or GP. Open-ended discharge, where no follow-up appointment is scheduled but the parent/carer can request follow-up by contacting the paediatrician directly, or follow-up over video consultation are the usual outcomes of face-to-face clinics. Parents and referring clinicians appreciate the model and the paediatricians appreciate 'belonging' to a neighbourhood.

**Model 3—Wessex Model<sup>7</sup>**

Model 3 is a hybrid of Models 1 and 2 and is also based on a single primary care geographical cluster/patch. MDT meetings are held in a GP practice, where attendance is both in-person and over videoconference link and can include paediatric subspecialty attendance. Specific case discussion takes place with joint learning on common topics that arise from cases. Guidelines and parental educational material from Healthier Together app and website <https://www.what0-18.nhs.uk/> are frequently used resources. Depending on local needs and experience, some patches only have an MDT once a month but most follow the MDT with a clinic in that GP practice where a paediatrician sees the child in the company of a GP.

of scheduled care is more likely to succeed.

**Some closing thoughts**

Getting this right matters. We need something different. Health systems across the world need to make best use of their precious, limited resources; paediatricians need to use their time for maximum effect; families need confidence in the health system, able to reach their trusted family doctor and know that doctor has easy access to specialist expertise. Doing nothing is not an option, and we are delighted that so many paediatricians across the UK (and beyond) are strong advocates for these new ways of working. The RCPCH has given integrated care a central place in the curriculum for training paediatricians <https://www.rcpch.ac.uk/resources/paediatrician-of-the-future>

There is no single 'right way' to deliver integrated child health. One of the models described might work for the reader or a different model. Innovation should embrace 'failure'—the most effective model usually evolves with multiple tests of change. Ideally, child health models should be aligned with other 'primary care facing' specialties, such as care of the elderly, mental health and respiratory medicine, to provide sustainability. Colleagues in primary care will more readily adapt to this new way of working if we co-produce a common model of integrated care, adapted to meet local needs and resources. The children and families we serve can navigate this when needed and use it with confidence.

Integrated care has been recommended for patient-centred and community-based healthcare in the NHS for more than 40 years, but integrated care remains sporadic. We invite colleagues to get in touch with either their experiences (positive and negative) or with queries: together we will be stronger.

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Use population health data, discussions at the MDT meeting and model evaluation to encourage a shift from reactive to proactive care. Consider an MDT focused on 'problem' groups, such as asthma.

Work collaboratively to secure permanent funding; be alert to system changes that can help: including the recent generous NHS England tariffs for Advice and Guidance. Use value analysis such as <https://www.cc4c.imperial.nhs.uk/our-experience/blog/child-health-hub-ics-value-analysis>, to show that compared with adaptations made in just primary or just secondary care, these models deliver improved quality and efficiency across the entire

healthcare system rather than just in one part of it.

**What are the lessons learnt?**

Introducing change in NHS pathways requires enthusiasm, time and teamwork, but even an abundance of these key ingredients does not guarantee success. We have identified barriers and described above how these might be overcome. Securing funding is probably the most challenging, and evidence of benefit to children and the whole healthcare system is important in addressing this.<sup>5 6</sup> By sharing our experience, we hope that the reader who is developing an integrated model

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#### REFERENCES

- 1 Royal College of Paediatrics and Child Health. Paediatric workforce information and evidence library. n.d. Available: <https://www.rcpch.ac.uk/resources/paediatric-workforce-information-evidence-library#waiting-times>
- 2 McLeod H, Heath G, Cameron E, *et al*. Introducing consultant outpatient clinics to community settings to improve access to paediatrics: an observational impact study. *BMJ Qual Saf* 2015;24:377–84.
- 3 El-Shanawany IR, Wade C, Holloway JA. The impact of a general practitioner-led community paediatric allergy clinic: a service evaluation. *Clin Exp Allergy* 2019;49:690–700. 10.1111/cea.13375 Available: <https://onlinelibrary.wiley.com/doi/10.1111/cea.13375>
- 4 Wolfe I, Satherley R-M, Scotney E, *et al*. Integrated care models and child health: a meta-analysis. *Pediatrics* 2020;145:e20183747.
- 5 Montgomery-Taylor S, Watson M, Klaber R. Child health general practice hubs: a service evaluation. *Arch Dis Child* 2016;101:333–7.
- 6 Martin T, Hapca S, Mistry N, *et al*. A new model to deliver scheduled outpatient care. *Arch Dis Child* 2022;107:616–8.
- 7 Patel S, Hodgkinson T, Fowler R, *et al*. Integrating acute services for children and young people across primary and secondary. *Br J Gen Pract* 2020;70:158–9.