Editorials

Child health indicators:

from theoretical frameworks to practical reality?

INTRODUCTION

There are compelling reasons to focus on child health and also measure our efforts to improve child health outcomes. Childhood and particularly early childhood is a crucial period for development and wellbeing. Long-term cohort studies[1] demonstrate that a healthy start to life can not only reduce later morbidity, but also produce individuals who are more able to participate in society.[2,3]

General practice is increasingly recognised as having a direct influence on children's health, from the provision of preventive services such as immunisation and Well Child checks, through to assessment and management of acute and chronic illness. Effective primary care also has an acknowledged role in reducing differences in child health outcomes between different groups in the population.[4] Therefore the measurement of the impact of primary care on improving child health should be seen as a vital component of health services' quality agendas worldwide.

The assessment of quality is appropriately a major preoccupation of health services. From early work defining quality frameworks[5] and the assessment of indicators,[6] there is now research and policy in volume and variety. This activity has not been without controversy. The literature around quality outcomes frameworks, for example, includes not only extensive assessment of effectiveness but also well-considered commentary discussing unintended consequences. These include diversion of resources and loss of provider confidence in use of indicators if clinicians perceive them to be of poor quality or contain conflicting evidence.[7]

There has been relatively little attention paid to child health quality indicators and guideline development in primary care settings.[8] This lack of activity extends from initial indicator development to a dearth of critical assessment of the underlying purpose and rationale for child health indicators.

WHY ARE CHILDHOOD HEALTH INDICATORS HARD?

There are a number of reasons why childhood indicators for primary care can be more problematic than their adult counterparts.

In OECD countries most children are healthy, with relatively few long-term conditions to provide indicators of severe illness morbidity. Potential primary care indicators of common childhood morbidity often focus on self-limiting illness, where coding may be problematic and for little apparent clinical gain, and the compliance cost of adding extra measurements in brief consultations can become a burden. To obtain a more accurate indication of factors affecting long-term outcomes requires a lens that is even more challenging and has more complexity. Supporting healthy childhood development is a multidisciplinary effort beyond health care alone. Outcomes are tied to the social environment, and early childhood outcomes are dependent on a wide range of variables including fetal-maternal physiology, maternal (paternal, family) mental health, infant nutrition, and the physical and emotional home environment. A good indicator would have to include the contribution of a wide range of health professionals including the GP, midwife, and social worker, and the impact of teamwork and coordination across different sectors. The best childhood indicator could be a composite 'early start' indicator assessing the contributions from all of the health and other professionals involved in care.

There may also be a political dimension to the lack of importance attached thus far to child health assessment. Children often lack power in health care decision making and indicators are driven to where more immediate health care spend is greatest, in the older age groups of voters with long-term conditions such as diabetes, ischaemic heart disease, and cancers.

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DEVELOPING CHILD HEALTH INDICATORS

Given the present low level of activity, the article in this edition of the journal by Gill *et al*[9] is both timely and important. Using the selected views of a convened panel of GPs with a special interest in child health the authors have produced a prioritised list of putative evidence-based indicators. Their selection of indicators across domains of routine care, chronic illness, child protection, and developmental assessment provide an initial framework to discuss the pragmatic use of these indicators in different clinical child health settings.

The process and the result raise some important questions. Those with special interests do not necessarily represent the views of silent majorities and there is an important debate around the challenges of engaging 'jobbing' clinicians in the aspirations of guideline enthusiasts. As Gill *et al* have previously identified, GPs are supportive of child health indicators, but feel their ability to implement them is often affected by a lack of clinical consensus and resource limitations.[10] It remains to be seen how well selection panel indicators are seen as relevant to the clinical realities of the majority of GPs and furthermore to the wider primary care teams, integral in delivering many of the outcomes.

Any indicator set also raises fundamental questions about the purpose of indicators.[11] It is easy to measure the measureable, and there is always the temptation to choose measures that reflect management of well-worn pathways such as asthma management, or choose relatively simple,

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more linear health issues, such as the identification of referral pathways. However, the greater gains may not always lie in the most obvious. GPs in the UK have previously identified as suitable possible indicators the reduction of emergency department and unplanned hospital visits, and improving identification and proactive care for 'at risk' children.[10] These tasks are more challenging to measure and beyond the domain of GPs alone.

While Gill *et al* make a strong case for their three categories of indicator, there may be a need to prioritise these in terms of compliance cost and impact. Measuring stimulant use for attention deficit hyperactivity disorder (ADHD) or identifying new insulin-dependent diabetics are both straightforward to do but may give relatively small gains at a population level compared with more challenging indicators such as identifying and responding to children facing neglect or abuse.

This paper has international relevance. In a similar vein the child indicator menu in the US and Australasia has also tended to focus on well-established preventive care, particularly immunisation and chronic illness management of asthma, while recognising the less comprehensive body of evidence and lack of attention paid to child health compared with adult indicators.[7]

MOVING FORWARD

Gill *et al*[9] have set a gently formidable challenge to general practice to not only debate their experts' selection and prioritisation, but also to decide whether this is a definitive indicator set or the start of a new journey in child health assessment.

While all indicators with good evidence base are worthy of consideration, significant gains will come from also adding more aspirational indicators, using harder to measure multidisciplinary outcomes, accepting at times a less secure evidence base, and looking to indicators measured across the healthcare continuum.

Ambulatory sensitive hospitalisation (ASH) rates provide an example of the latter. ASH admissions in childhood are primarily concerned with the management of acute infectious disease. Variation in their rate is due to a complex attribution that includes socioeconomic environment, health literacy, primary care access and management, through to policies and procedures at emergency departments and paediatric wards. Using ASH rates as a 'can opener' to explore issues rather than as a 'dial' of easily set payment targets informs a quality agenda that covers topics from integrated clinical pathways to the difficulty of coding common childhood symptoms such as wheeze.

Indicator priorities change rapidly over time. If weighting of need is considered, there remain some significant omissions in current suggested indicators, notably one for general practice engagement with childhood obesity.

CHANGING THE CHILD HEALTH INDICATOR PARADIGM

Gill *et al*[9] make a good case for choosing indicators utilising data easily extracted from general practice information systems. The advantage of not placing unnecessary compliance on the primary care workforce is clear. However, many of the most important issues in child health demand a level of engagement by the primary care workforce which is not well achieved by an 'out of sight out of mind' automated audit. With limited ability for use of outcome measures in these more challenging health and/or social domains the use of intermediate steps such as assessing teamwork and coordination of care become more important, alongside frequent review to maintain confidence at the provider level in both the purpose and process of evolving child health indicators. This would require a measure of trust and 'payment for participation' rather than easy to benchmark measures of test outcomes or prescribing.

The value of the theme of childhood indicators for the *BJGP* is not just the production of an indicator framework, but the opportunity it offers to enhance the debate about the importance of the care of children in general practice.

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