

# Care Management for Children With Medical Complexity: Integration Is Essential

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In the report “Effectiveness of a Comprehensive Case Management Service for Children with Medical Complexity,” Simon et al<sup>1</sup> examine the impact of a care management intervention that is based in a pediatric academic medical center on quality and cost outcomes for children with medical complexity (CMC) and their families. Rigorously designed studies like this are important and timely because increased attention is being given to achieving the national strategic priority to improve outcomes for high-resource–using children and youth. These researchers recognize that high-value care for CMC requires the coordination of efforts across providers and settings. Its conception offers an important step toward addressing and testing potential solutions aiming to address the general, systemic issue of a lack of a measurable, standardized process by which roles and responsibilities are defined for care delivery across settings, provider types, and disciplines. This leads to the fragmentation of care and ambiguity about accountability for outcomes, resulting in less reliable, less efficient, uncoordinated care of lower value for CMC and their families.<sup>2,3</sup>

The intervention involved the engagement of a hospital-based multidisciplinary team, whose initial effort was the administration of a comprehensive needs assessment and the creation of individualized shared care plans (ISCPs). An ISCP was produced in collaboration with

the family, the comprehensive case management service (CCMS) team, and community-based primary care providers (PCPs), and it included recommendations for routine and contingency care.

The reported outcomes are mixed. Although the intervention demonstrated improved family experiences of care provision, the CMC cohort incurred an increased cost with no improvement in functional outcomes compared with the nonintervention cohort. The nonintervention group did not incur higher costs, and there was no significant difference in functional outcomes, although family experience was not as improved compared with the CCMS group. The authors justifiably note that the relatively short time frame in which their cohort was managed possibly accounted for the lack of improvement in these domains.

Although many CMC receive care in academic children’s hospitals, hospital-affiliated primary care networks, or tertiary care centers,<sup>4,5</sup> not all of them do. PCPs often play a key role as the principal locus of care coordination, working with subspecialists in various collaborative, integrated care arrangements.<sup>6,7</sup> The current study included a functional linkage to community PCPs in the intervention group, having solicited their input for the creation of the ISCP. The community PCPs also received the final version of the ISCP. The nonintervention, usual-care–model group consisted of PCPs who

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coordinated the care of the CMC directly and in conjunction with subspecialist consultants.

Despite the lack of improvement in cost outcomes for the population served by the CCMS model, the approach nonetheless provides a foundational framework by which this care integration paradigm may be further evaluated. As longer-term outcomes are gathered to assess its role and potential value in caring for CMC, the CCMS model might be scalable to PCPs in other settings, such as private practice, Federally Qualified Health Centers, or physician networks. Collaboration with their academic medical center-based colleagues to provide care management services when gaps are identified would be strategically desirable and worth evaluating moving forward.<sup>3</sup>

Implementing an integrated care framework broadens the singular strategic objective of identifying the optimal locus of care management. The expanded goal would include an assessment of the efficacy of care integration across multiple settings

and providers, recognizing that care coordination activities typically occur in different settings and by different members of the care team at various points in time. Functional requirements of care integration and their concomitant performance measures should be clearly specified and resources allocated to support high-value care delivery. Ultimately, care management for CMC is not likely to be a 1-size-fits-all model. Its effective implementation will be influenced by many factors, such as local and regional resource availability, the training of families and providers in care integration techniques, the implementation of care integration enabling technologies, and sustainable financing schemes, to name a few. Measuring care integration offers an approach to identify, leverage, and optimize existing resources, whether in community or hospital settings, which is a strategy that can be used to avoid redundancies and inefficiencies of care. To ensure the success of this strategy, engaging the families of CMC in the design, implementation, and performance

evaluation of any care integration model is essential to ensure that care gaps are identified and mitigated. Given its design, which supports participation by diverse care team members and stakeholders, including payers, the CCMS model is a worthy pilot from which we must gain additional experience.

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## ABBREVIATIONS

CCMS:	comprehensive case management service
CMC:	children with medical complexity
ISCP:	individualized shared care plan
PCP:	primary care provider

**COMPANION PAPER:** A companion to this article can be found online at [www.pediatrics.org/cgi/doi/10.1542/peds.2017-1641](http://www.pediatrics.org/cgi/doi/10.1542/peds.2017-1641).

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