Technology Dependent Children: Hospital Vs. Home Care

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Foreword

This technical memorandum is about problems arising out of success. Recent advances in medical technology have permitted sick children who once would have died to survive with the assistance of sophisticated equipment and intensive nursing care. Often, the assistance is needed for just a short time, but sometimes the dependence on life-sustaining technology is permanent. As technology for helping keep children alive has improved, a new population of technology-dependent children has emerged.

This small but growing population of children raises new problems for the health care system. Because the care is expensive—often more expensive than most American families can afford—children and their families depend on third-party payers—insurance companies, Medicaid, or philanthropists—to finance the needed care. But the structure of the health insurance system has not kept pace with the needs of these children. Most technology-dependent children are eligible for Medicaid coverage in the hospital, but coverage of home care is more limited. Consequently, some children have remained hospitalized even when their families are able to provide good, lower cost care in the home.

OTA was requested by the House Energy and Commerce Committee and the Senate Labor and Human Resources Committee to examine the problems of health care financing encountered by technology-dependent children as part of a larger assessment, Technology and Children’s Health. The committees wanted to know how many children are technology dependent, how home care and hospital care compare in cost, and how well private and public third-party payers cover the services needed by these children.

This technical memorandum provides a working definition of technology dependence and estimates the prevalence of technology dependence among American children. A principal finding is that the size of the population varies dramatically with the clinical criteria used in the definition. OTA has also found that the cost-saving potential of home care depends to a great extent on attributes of the family and the home environment. The ability and willingness of family members to provide ongoing nursing care for a substantial part of the day are central to lowering costs to third-party payers, although they may require great sacrifice on the part of the family.

The conduct of this study was guided by the advisory panel for the OTA assessment, Technology and Children Health, chaired by Harvey Fineberg. In addition, many government officials and health care professionals were consulted. Information and insights provided by parents of technology-dependent children were also very helpful. Key OTA staff involved in the analysis and writing of the technical memorandum were Elaine J. Power and Judith L. Wagner.
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NOTE: OTA appreciates and is grateful for the valuable assistance and thoughtful critiques provided by the advisory panel members. The panel does not, however, necessarily approve, disapprove, or endorse this technical memorandum. OTA assumes full responsibility for the technical report and the accuracy of its contents.
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