In 2005, 513,000 children were living in foster homes in the United States. Several decades of research have demonstrated that nearly half of all children in foster care have chronic medical problems, and up to 80% have serious emotional problems. Despite the overwhelming evidence of need, studies consistently demonstrate that many health care needs of children in the foster care system go unmet. Stark evidence that children are not receiving timely services has come from a range of studies. The 1995 General Accounting Office report demonstrated that one third of children had health care needs that remained unaddressed while they were in out-of-home care, and a recent analysis of the National Survey of Child & Adolescent Well-Being documented that only a quarter of the children in out-of-home care who had behavioral problems received mental health services within a 1-year follow-up period.

This article reviews the challenges health care systems have faced as they have attempted to improve health care outcomes for children in foster care. It discusses several of the promising health care strategies occurring outside the perimeter of child welfare and identifies some of the key impasses in working alongside efforts in child welfare.
welfare reform. The authors posit that the greatest impasse in establishing a reason- able quality of health care for these children is a child welfare practice and system in which children move frequently among multiple homes and in and out of the child welfare system. The central thesis of this article is to demonstrate the implausibility on improving health-related outcomes for children in foster care without fundamentally addressing the impact of frequent placement disruptions on the lives and well-being of children. Finally the authors propose potential strategies for targeting incremental reform efforts, specifically involving placement stability, as a vehicle for multidisciplinary reform inclusive of the health care system.

THE HEALTH CARE NEEDS OF CHILDREN IN FOSTER CARE: THE STATE OF THE STATE

Prior research establishing the large burden of unmet need among children in foster care has not been easy to reconcile with other data demonstrating the high intensity of service use by these children. Use of mental health services by children in foster care is 8 to 11 times greater than that experienced by other low-income and generally high-risk children in the Medicaid program.13,14 Children in foster care account for 25% to 41% of mental health expenditures for children within the Medicaid program although they represent less than 3% of all enrollees.14,15 The answer to this apparent contradiction lies in recent data showing that up to 90% of mental health costs may be accounted for by 10% of the children.15,16 Because interventions often are difficult to acquire early on, the brunt of the services provided are being provided at the back end of the system, when children are living in residential treatment, group homes, psychiatric facilities, and hospital settings. A small number of children are receiving intensive, expensive services because the system has neglected them until their needs became catastrophic. This situation reflects a failure to screen adequately for behavioral health problems and to provide services to the overwhelming majority of children who otherwise could be excellent candidates for treatment and who probably would respond to more modest levels of treatment if such services were provided at the earliest possible time.

Ultimately, the failure to address the needs of children adequately while they are young and early in their placement into out-of-home care has manifested in poor long-term outcomes. Among former foster care youth in the Northwest Foster Care Alumni study from 2005, 54% reported at least one major mental health diagnosis, more than double the rate in the general population (22%). Foster care alumni reported almost three times the rate of anxiety disorders, twice the rate of depression, and four times the rate of substance abuse when compared with the general population. Most alarmingly, 25% reported symptoms of posttraumatic stress disorder, more than six times the rate in the general public and twice the rate experienced by returning war veterans (Fig. 1).9

THE ROLE OF PLACEMENT INSTABILITY IN EXACERBATING THE CRISIS

Although it would be easy to blame the poor health outcomes of children on the failure of public health systems to provide adequate settings to address the needs of these children, such a conclusion fails to consider the tremendous difficulty that disruptions in placement have on the ability to provide high-quality care. That is not to say that the health care system is absolved of fault in this discussion, but rather that a cascading relationship between disruptions in placement and worsening health outcomes has taxed the health care system. Placement disruptions exacerbate behavioral and other health problems among children, and they also make it more difficult to provide access to optimal care. For example, not only do caregivers change with every change
in placement, but the often children also cycle through multiple health providers, each unaware of the child’s past medical history and uncertain of the care plans for the child’s medical and behavioral health problems. Changes in placement can thus prevent the establishment of continuous relationships with health service providers, inhibiting a provider’s ability to get to know the child and the child’s complete health history. In turn, caregivers who have little information about new foster children often disproportionately seek services from emergency departments. It is not surprising, then, that 75% of emergency department visits within 3 weeks of a placement change occur in the period immediately following that placement change (Fig. 2).17

The increasing use of psychotropic drugs by children in foster care is a clear example of the challenge that health care providers encounter.18,19 The General Accounting Office in Washington recently reported that nearly one in three states have identified the oversight of psychotropic medication use in state foster care populations as one of the most pressing issues facing their child welfare systems in the next 5 years.20 A recent study from the National Survey of Child and Adolescent Well-Being documented that 13.5% of children in the child welfare system were using medication, two to three times the rate of other children in the community.21 Examination of Medicaid records from the State of Texas in 2004 revealed that 43% of children in foster care were using three or more medications concomitantly, and 22% were duplicating medications within the same pharmacologic class.22

The increasing use of psychotropic medications by children in foster care can be linked directly to the fragmented system of care for these children and the inadequate resources for assessment and treatment. It can also be linked to multiple placement moves, lack of foster parent and caseworker training, limited provision of information to caregivers about a child’s specific needs and available services, and insufficient collaboration between child welfare, health, and mental health systems.23–26 In addition, children in foster care who have challenging behaviors are likely to be treated with psychotropic medications in lieu of addressing the issues of instability and failed attachments that may be at the root of these behaviors. In practical terms, mental health professionals might perceive the suitability and efficacy of alternative
behavioral interventions to be limited if children move frequently between homes or if they are likely to be under their professional care for only brief durations. Frequent moves between homes add the potential for treatment discontinuity that might expose children to the use of increasing numbers and combinations of medications, to their inappropriate administration, and even to abrupt discontinuation. Finally, children may lack an adult in their lives to consent and advocate for alternatives to medication when behavioral problems are identified. Of paramount concern is that placement instability can be linked directly to the failure to provide high-quality mental health treatment, and ultimately these failures affect children’s duration of care, level of care, and opportunities for permanency.

Child Stability Issues Undermine the Potential Effectiveness of Several Promising Health Interventions

Several promising programs and practice models are seeking to improve the health care status of foster children. The “medical home” is one such model that recently was mandated in the Fostering Success Act of the 110th Congress that was signed into law by President Bush in October, 2008 (P.L. 110–351). The model advocates that children in foster care have a consistent “medical home” where the child maintains the same practitioner and receives all assessment and referrals for specialized care. The physicians in such settings also are able to influence case decisions and advocate to child welfare professionals in a more integrated fashion for possible interventions—be they in health or child welfare capacities—to improve the well being of the children they serve. The American Academy of Pediatrics Task Force on Health Care for Children in Foster Care has developed a set of standards defining the medical home model, emphasizing that care is comprehensive, coordinated, compassionate, consistent, culturally competent, and family focused.27

There are no data on the percentage of children in foster care who have a medical home. In the general population, the national median of all children who had medical homes was 47% percent, with a range among states from 33% to 61%.28 It is probably a safe assumption that children in foster care fall far below any national median for participation in medical homes. The medical home model nonetheless holds promise as an optimal method for managing the complex medical needs of children in foster care.

Fig. 2. Timing of emergency department visits that occurred within 21 days of entry into foster care or after placement changes for 2358 children entering foster care in Philadelphia from 1993 to 1996. (From Rubin D, Alessandrini E, Feudtner C, Localio A, Hadley T. Placement changes and emergency department visits in the first year of foster care. Pediatrics 2004;114(3):e354–60; with permission.)
care. It also would provide an advocate to act on the child’s behalf when issues of consent are raised for behavioral health treatments for children. Finally, by emphasizing continuity of care despite placement disruptions, a medical home can help prevent the loss of information about the child’s health history and also can provide crisis management for the behavioral and physical health problems that so often escalate during this time period.17

Other promising approaches have been to provide more integrated models of care, whereby case management for health care services are co-located either virtually or physically with child welfare units. Many child welfare systems have taken advantage of the flexibility in case management funding within the Medicaid program to finance health care case management services within their agencies and have attempted to coordinate better the medical, educational, and social services for children in foster care. At least 38 states have used Medicaid targeted case management (TCM) funding in some capacity for their child welfare populations.29 A 2005 Urban Institute study found that only about 17% of foster care children receive TCM; but those who do fare better in receiving health services than those without TCM.30 For instance, 68% of children with TCM received physician services, versus 44% of children without TCM. Dental care (44% versus 24%), care from other practitioners (31% versus 14%), and therapy (11% versus 2%) are other vital health services that were obtained at greater rates among children with TCM.30

Many states and counties have used case management funding to create health care coordination units directly within their child welfare agencies. For some, this coordination has taken the form of health passports for children, using Medicaid claim data to create a medical history or profile for all of its recipients using a centralized database. Some states take this process one step further, and all Medicaid enrollees receive a smart card that contains a chip programmed with a summary of the child’s medical history, including immunizations. Such a system offers the additional advantage of reducing the loss of medical information as a child moves in and out of the child welfare system.31

The State of Texas recently has invested heavily in developing a statewide health passport system for children entering foster care.32 The record begins when the child is placed in out-of-home care and is updated and accessed via Web-based provider and caseworker access. The record is maintained only until the child exits care.32 In the San Diego child welfare system, public health nurses monitor the health records of all children entering foster care, and data clerks assist in creating and maintaining a health passport (ie, a permanent transferable documentation of medical history) for children entering care but only while the children remain in care, similar to the Texas passport system.33

Other systems have focused less on the medical health passport and more on innovative strategies to improve access to and referral for mental health services. In Philadelphia, behavioral health workers are beginning to operate alongside intake workers for the child welfare system to triage and refer children who reportedly are exhibiting concerning behaviors. Other systems go much further by attempting to integrate newer models of mental health care delivery that partner the caregivers of children with mental health supports and services to improve health outcomes for children. The most cogent example of this approach is the multidimensional treatment foster care model, which operates as a more unrestricted placement for children in lieu of residential treatment. Caregivers more intensively trained for children who have behavioral problems serve a key role in this model, and in the best settings these caregivers are united with well-resourced supports and services that provide therapeutic services to children directly in their homes.34,35
Fundamental Challenges for Health Care Innovations

The programs discussed in the previous sections are only a few of many examples of the strategies that systems have invoked to coordinate the health care of children in foster care. A further discussion of other strategies can be found in the textbook authored by McCarthy, Meeting the Health Care Needs of Children in the Foster Care System. Although these programs offer innovative approaches to addressing health disparities for children in foster care, the successful dissemination of these programs has often been problematic. Medical home models, for example, are easier to implement in smaller population centers, where a single center can provide a minimum standard of care for all children traversing the child welfare system, seeing children every time they change placement within a locality. In larger cities, where a single center is an implausible solution, and where children may move over large geographic distances when placements change, medical homes are less achievable. With regard to health passports, it remains uncertain who should fill out these passports, a problem that is magnified every time a child changes placement. Finally, with regard to integrated models of care such as treatment foster care, sustainable funding for case management is continuously threatened, most recently when the Deficit Reduction Act of 2005 sought to restrict the use of Medicaid funds for such purposes.

Even when the financing is secure, the financial support required by integrated models can be both a boon for recruiting high-quality caregivers and a reverse incentive that actually can discourage caregivers from providing permanency to children. For instance, as the reimbursement for providing treatment-level foster care becomes more generous, it often exceeds what caregivers—and their agencies, for that matter—can receive in return for providing long-term permanency or adoption to children. Certainly, agencies will not want to lose their treatment-level caregivers to adoptions, given that the available pool of these caregivers is small, and the reverse can be true, also: treatment-level caregivers often wish to continue providing that level of care (with its reimbursement) and so are less likely to request adoptions. As a result, any gains realized in treatment foster care, such as improvements in child behavior, usually trigger another move for a step down in care. As such, gains often are lost when children are returned as a routine matter to more unrestricted settings with less support for behavioral issues and where the cascade of placement disruptions and poor outcomes can continue.

Certainly, the problems that continue to undermine the effectiveness of health innovations are not insurmountable. Some programs have tried to accommodate their models of care to minimize such problems. Chicago, for example, has developed an integrated network of health providers who receive enhanced Medicaid reimbursement and case management assistance to see children in foster care. In addition, recent advances in information technology and cross-system data-sharing capacities may increase the potential for automating the completion of health passports through computer-generated abstraction of service claims, a solution that already is being invoked in some municipalities.

There is no lack of ingenuity and investment by health care professionals when it comes to developing promising approaches to address the complicated health needs of children in foster care. Each model’s limitations, however, are amplified exponentially by the likelihood of disruption of placement and coverage and thus disruptions in continuity of care. Stability in placement is prerequisite for the success of practices that then can lead to better outcomes in health and well being for children in care over the long term.
System-Level Instability Also Undermines the Effectiveness of Health Innovations

At an organizational level, the instability in child welfare systems often mirrors the experience of children in their care, contributing to the problems in health and well-being created by frequent and poorly monitored placement changes. In October, 2004 the Children’s Bureau of the US Department of Health and Humans Services announced that none of the 50 states or United States territories was able to pass the first round of Children and Family Service Reviews. Additionally no states achieved substantial conformity to the federal standards for placement stability. At least 32 states and cities are operating pursuant to consent decrees, which are judgments entered into court by consent of both parties in which the defendant agrees to perform or stop performing specific activities; in most situations, the court maintains jurisdiction over the decree, requiring the parties to report regularly on the activities agreed to in the settlement document. Many of the decrees more than 10 years old, and 32 involve the provision of health services for children in foster care. Under these circumstances, it is expected or mandated that radical transformations occur, but the track record of successful system change in these contexts has been mixed, at best.

These system failings often result in mandates for procedural changes in an attempt to standardize practice through rules: add a new form here or an additional risk assessment there, as well as an abundance of “pilot” interventions or programs, many of which never get rolled out to system-wide implementation. In many child protective services agencies there is an order of what have been called “street-level bureaucrats,” who use personal experience and discretion in managing case-level events and who have seen multiple new projects come and go, offering little or no meaningful change in their daily operations. Front-line workers, who for the most part carry the burden of decision-making in foster-care cases, often do so with limited input from others and with very little routine supervision or accountability related to the quality of practice.

Child welfare systems can present a revolving door of new agendas, new leaders, and new workers. At the leadership level, the average tenure of a child welfare director is about 2 years (T. Field, personal communication, 2008). New leaders commonly bring new agendas, and so the systems absorb that change as well. As for as front-line workers, research has demonstrated that caseworker turnover, which is estimated to be between 30% and 40% percent annually, has a significant impact on child stability. When there is caseworker turnover and a new caregiver, in a field notorious for its incomplete and/or inaccurate case file documentation, much of the child’s past health or treatment history can be lost or unavailable in urgent circumstances.

Despite these challenges, system-level reform has occurred. Many leaders and advocates have recognized that years of myriad new procedures and mandates have created compliance-driven systems in which the clinical dimension of practice focuses on rules and deadlines and not on traditional family-centered social work. In many systems around the country, reforms now are attempting to create some stability by focusing on a consistent and basic skill set, sometimes referred to as the “practice model.” Importantly, these “practice model” reforms typically are combined with improvements in the system’s ability to track performance through quantitative and qualitative data collection at the worker, provider, and system levels. These reforms hold some promise for greater stability and accountability in the child welfare system.
THE NEED FOR HEALTH INNOVATIONS ROOTED IN CHILD WELFARE REFORM

The enormous challenges of reducing placement instability for children and the more fundamental instability within child welfare systems may help explain why better health outcomes for children in foster care have been difficult to achieve. These challenges, however, do not relieve pediatricians of the responsibility of working for the required improvements in the system, whether in traditional and familiar areas of health care or in areas of financing and the delivery of child welfare services, where pediatricians rarely venture. What is needed, however, is a paradigm shift with respect to the expectations for and design of health care interventions in the context of the larger issue of the performance of the child welfare system. Indeed, the principal lesson learned in reviewing the history of health care delivery for children in foster care is that any health care intervention aimed at children in foster care needs to address the context of the system in which it will be housed. In other words, the road to more substantive reform in the delivery of quality health care to children in out-of-home placement starts with an actively engaged medical community participating in efforts to improve the child welfare system and to develop newer models that do not depend entirely on traditional health care providers (eg, in mental health) to fulfill the needs of these children.

Doctors and other health care providers who treat children in foster care must have a seat at the child welfare reform table. Their developmental perspective on issues such as placement stability could contribute enormously to system reform. Moreover, their opinion and expertise on issues such as how to respond to the trends around psychotropic drug use for children in foster care are critical. This kind of participation will require physicians to take a greater role in their own communities by providing oversight to the child welfare system and regular expert counsel to its leadership.

The goal of such an effort by physicians within the child welfare system would be to help create a permissive environment for health care reforms. To meet this goal, physicians must be advocates within their communities for efforts to reduce the size of the child welfare system and to improve placement stability and permanency for the children who will continue to need and depend on it. The best way to improve the efficacy of health interventions is to reduce the movement of children within the system and thereby make efforts in health care coordination more manageable. In addition to the mandatory reporting of suspected abuse, the physician may have an additional moral obligation to help a family identify practical alternatives to foster care, such as kinship caregivers who can facilitate a child’s early exit from the system to permanency. So physicians can be advocates for the families they report, even though mandatory reporting laws do not require physicians to identify placement alternatives nor are they responsible for the placement decisions that are made. At a systems level, physicians may need to advocate for more integrated, real-time surveillance and casework related to placement moves and for using stability, not simply adoption and reunification, as a metric to evaluate the performance of public and provider agencies. That call to action also would entail the responsibility of remaining engaged with child welfare systems and offering to participate in the monitoring of outcomes.

If systems become more manageable and children easier to track, many of the health care strategies discussed in this article will be more effective. Medical homes will be less likely to be disrupted and will serve as an extra check and balance in the system to make sure that adequate coordination is provided for children and that they remain safe in their homes. Health care passports will be easier to enforce and maintain. More efficient placement decisions made earlier in care also will translate to smaller populations of children needing to remain in supervised care, and for
the children who do need supervised care, integrated models of care can be more narrowly directed, and the coordination of care will be easier to manage. Finally, when the health problems for children in foster care are related to a fault of the health care system itself, such as in the poor availability of behavioral health providers for children, physicians can play a critical role in designing new interventions that rely less on physician involvement for consultation and more on training caregivers to be more adept in helping children who have significant behavioral problems. Much of this innovation is occurring already. Empiric family-based therapy aimed at empowering families to confront the behavioral needs of their children more effectively is offering a promising approach to improving outcomes for children. This promising approach is the ultimate realization that traditional health care options may have limited benefit for children in foster care, and that cross-disciplinary training and support will be more likely to succeed in the long term.

SUMMARY

Achieving better outcomes in health and well being for children in foster care will require contributions from a range of professional, community, and family networks. Physicians who treat children in foster care can play an important role in shaping better child welfare programs and policies on the basis of what is developmentally and medically best for children. An improved child welfare system will view child health and well-being outcomes, and the programs needed to achieve them, as central to its mission of care.

REFERENCES