

116

*The First Step*

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A HEALTHY START

"In every child who is born," James Agee wrote, "under no matter what circumstances and of no matter what parents, the potentiality of the human race is born again."<sup>1</sup> Last year, more than 4,200,000 babies were born in the United States, the greatest number in the last thirty years.<sup>2</sup> The day-to-day physical nourishment these children receive—the quality of care they get during the first months and years of life—will shape profoundly their readiness for school. If there is one right that *every* child can claim, it is the right to have a healthy start.

For the nation's first education goal fully to be met, health workers and educators must, finally, join in common cause. Failure to do so will have a devastating impact on America's educational and economic future, and most especially on our children. The Business Roundtable, comprised of top corporate leaders, makes this compelling claim about the linkage between health and education: "Raising our expectations for educational performance will not produce the needed improvement unless we reduce the barriers to learning that are represented by poor student health."<sup>3</sup>

In response to this challenge, a three-pronged strategy is proposed: First, as a long-term plan, we call for a national education program, a course of study, in every school to educate tomorrow's parents about good health. Second, we propose that the federal nutrition program for women, infants, and children, better known as WIC, be fully funded. Third, to guarantee access to basic health care for all mothers and babies, we urge the establishment of a national network of Ready-to-Learn Clinics, building on existing programs.

During the past one hundred years, child health in this country has undergone a remarkable transformation. Dreaded diseases such as typhoid fever, diphtheria, tuberculosis, polio—have been largely conquered. Milk contamination, which once killed thousands of children, is now effectively controlled. Mumps and measles which still threaten are, however, no longer widespread epidemics. Today, the odds of a child

in the United States dying from disease or injury are one-half of what they were in 1950.<sup>4</sup>

Still, our rejoicing should be muted. Despite miraculous medical advances, large numbers of babies in this country are physically deprived in ways that diminish their quality of life and restrict their capacity to learn. While no child in America should live a single day with pangs of hunger, it is the nation's shame that nearly half a million children are malnourished and that twelve million are hungry some time every month.<sup>5</sup> Further, fetal malnutrition now affects up to 10 percent of babies born in the United States and studies show that the damage to the fetus caused by lack of nourishment during the twelfth to twenty-fourth weeks of gestation, a time most critical to brain growth, cannot be reversed.<sup>6</sup>

Clearly, good health, which is so closely linked to learning, begins before birth. What the pregnant woman eats and drinks is crucially related to the potential school performance of the child. Caloric and protein deficiency during pregnancy, for example, can permanently impair learning ability through a decrease in the number of brain neurons.<sup>7</sup> Further, when an expectant mother takes just one dose of drugs, the fetus in the amniotic sac is bathed in drugs for days risking prospects for grave physical impairment.<sup>8</sup> Even before conception, drug-use by the mother or father may tragically damage the unborn child. Further, fetal exposure to alcohol increases the child's risk of language deficiency and mental retardation.

Mothers who smoke during pregnancy place their child at risk for low birthweight, asthma, and growth retardation.<sup>9</sup> Children of smokers also tend to lag behind their peers in cognitive development and educational achievement and are particularly subject to hyperactivity and inattention. Further, the effect of smoking is cumulative, with children of heavy smokers scoring lower on verbal tests than those of lighter smokers, or nonsmokers.<sup>10</sup> As one researcher put it: "At no time does the well-being of one individual so directly depend on the well-being of another."<sup>11</sup>

What's so disturbing is that approximately forty thousand babies are born each year with serious problems that are a direct result of alcohol abuse by mothers during pregnancy. About seven thousand of these infants have fetal alcohol syndrome, a condition that results in mental retardation. Another thirty-three thousand of the alcohol damaged children suffer problems that restrict their capacity to learn—limited attention span, speech and language deficiencies, hyperactivity. Further, the mothers

of more than 10 percent of all newborns in this country—425,000 in 1988—used marijuana, cocaine, crack, heroin, or amphetamines during pregnancy. Cocaine and crack associated with prematurity, smaller head circumference, and lower birthweight, all of which place a child educationally at risk. (cite)

Table 1

#### Low Birthweight

Without dramatic intervention, this shocking pattern of child abuse is certain to increase. Ninety-one percent of the nation's high school seniors—tomorrow's parents—have, according to a recent study, used alcohol, 66 percent have smoked cigarettes, 44 percent have tried marijuana, and 31 percent have experimented with an illicit drug other than marijuana (table 2).<sup>12</sup> And beyond this abuse, today's young people often are not well nourished and do not get adequate exercise.<sup>13</sup>

In a national Carnegie Foundation survey of teachers, more than half of the respondents said that "poor nourishment" among students is a problem at their school. Sixty percent cited "poor health" as a problem.<sup>14</sup> One teacher in a midsize city observed: "Every year there seem to be more physical problems at our school that interfere with learning. I know that children who don't eat well or don't get rest can't do well in school. Yet, that's exactly what I'm seeing more and more." A kindergarten teacher said: "An increasing number of children who come to school have attention problems that I'm being told relate to poor nutrition and deficiencies in their diet." Another teacher told us: "Today's students take far better care of their stereos than they do their own bodies. And what's so sad is that later on they'll pass on this abusive behavior to their own children."

Table 2

High School Seniors in the Class of 1989  
Who Have Used Various Drugs

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<u>Drug type</u>	<u>Percent</u>
Alcohol	91%
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SOURCE: National Institute on Drug Abuse, 1991.

If every child in America is to be ready to learn this nation simply must interrupt the cycle of ignorance about physical well being that has such tragic consequences for children. And students of all ages urgently need to be taught the facts of health, as well as the facts of life. Specifically, we propose that every school district offer a new health course as a requirement for high school graduation, with units of study threaded through the whole curriculum, from kindergarten to grade twelve. "What we need is a *national policy*," says Ramon Cortines, superintendent of schools in San Francisco, "one that supports comprehensive school health education."<sup>15</sup>

In our proposed new curriculum—called, perhaps, "The Life Cycle"—wellness and prevention would be central, integrating themes. Some study units could be taught as separate subjects, while others might easily be woven into other courses—history, science, and physical education, for example. As students progress from grade to grade, they would—through this health program—gain respect to their own bodies and learn to appreciate the mystery of birth, the nurturing of life, and the imperative of death. Very early they would begin to reflect on what an awesome responsibility it is to bring a new life into the world.

As a capstone unit, we propose that each student participate in an "each-one-teach-one" project, passing along to family and friends what they have learned in school, thus expanding prospects for good health. There is precedent for this suggestion. At the turn of the century, a cholera epidemic swept New York City. Thousands of babies died. In response, the public schools, organized a health course for high school girls to instruct them in the care of babies. After completing their training, the students—called "Little Mothers,"—received an "honor badge" and became health teachers in their own homes. Each were made to understand that she had a weighty obligation to aid in saving babies' lives.<sup>16</sup> Could schools today introduce, for both boys and girls, a modern-day version of the student health corps that was so effective nearly a century ago?

We are not suggesting a single health curriculum for all schools. The Life Cycle would vary, of course, from school to school. Still, common trends would be required and a program designed by the New York Academy of Medicine—illustrates what we have in mind. This curriculum includes units called "Growing Healthy," in which elementary students study such topics as physical and emotional health, family life, and the damaging effects smoking, drugs, and alcohol have on the body. The program also includes a middle-school unit called "Being Healthy" which focuses on adolescent growth, physical fitness and such health issues as AIDS, "Family Living" and "Nutrition for Life."<sup>17</sup>

In Philadelphia, a group called "Education for Parenting" also has an appealing health education program called, "Learning About Parenting: Learning To Care." Goals include helping students become understanding and be more cautious about becoming parents, decreasing the incidence of child abuse and neglect and learning to value parental roles. Students, from kindergarten through grade twelve, are introduced to the responsibilities and rewards of parenting. A unique feature is to have new parents and their babies visit the classroom, giving students firsthand understanding of the challenges of raising children and allowing them to observe and record the growth and abilities of infants who visit.

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baby. Learning becomes more meaningful when its related to personal experiences and feelings. We feel fortunate indeed to be participants in this program."<sup>18</sup>

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We are convinced that health education *can*, indeed, make a difference. A Rand Corporation study, for example, found that eighteen weeks of health instruction produced a significant decrease in smoking and other drug use. (cite) A health education program in South Carolina, was credited with reducing adolescent pregnancies. (cite) A Minnesota health project reduced the numbers of students who started smoking. (cite) A study sponsored by The Metropolitan Life Insurance Foundation concluded that the percentage of students using alcohol dropped from 43 to 33 percent after health instruction, and smoking decreased from 33 to 14 percent (table 3). "The evidence that health education works is overwhelming," is the way National Health Education Consortium puts it, "but national policy is needed."<sup>20</sup>

Table 3

Students Who Reported They "Often" or "Sometimes" Used  
Various Substances After One and Three Years of Health Education

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	<u>After One Year</u>	<u>After Three Years</u>
Alcohol	43%	33%
Cigarettes	33	14
Drugs	13	5

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SOURCE: National Health/Education Consortium, The Metropolitan Life Insurance Foundation.

Educating today's students—tomorrow's parents—is a long-term strategy, one that must get started now. Meanwhile, to achieve readiness for all, another crisis—poor nutrition among at-risk mothers and babies—also requires immediate attention. The reality is that if a pregnant woman does not eat well her nutritional deficiency can interfere with the fetus' development, increasing the possibility that the baby will be malformed or mentally or physically retarded.<sup>21</sup> Yet, in the United States today, literally hundreds of thousands of expectant mothers are undernourished and it's also a depressing fact that millions of preschool children go day after day without the nutrition they need for good health and effective learning.

How should we proceed? The federal food program, called WIC, was signed into law in 1972, precisely to meet the nutritional needs of poor women, infants, and children. Milk, cheese, eggs, cereal, and baby formula are distributed monthly through eight thousand service centers across the country.<sup>22</sup> And currently nearly five million low-income women and their children are being served.<sup>23</sup>

Further, WIC is effective. It has proven to be successful in bringing mothers into prenatal care during the first trimester of pregnancy, in reducing infant mortality, in raising birthweights, and later, in improving the educational performance of children.<sup>24</sup> It's a solid economic investment, too. A recent study found that every dollar we invest in WIC saves four dollars or more in medical costs alone.

But what's so hard to accept is that despite WIC's demonstrated record of success, only 55 percent of those eligible are now being served, leaving vast numbers undernourished. How can we live comfortably with the fact that year after year millions of mothers and children in this country fail to receive even the minimum food supplements they require. Surely the time has come in America to guarantee that all of the nation's mothers and babies will be well fed to help achieve this goal. We propose that WIC be fully funded—increased from \$2.4 to \$4.5 billion.<sup>25</sup> This is a moral imperative. As Winston Churchill said on one occasion, "there is no finer investment for any community than putting milk into babies."<sup>26</sup>

We also recommend, as yet another part of the ready to learn campaign, that the educational component of WIC be strengthened. According to existing regulations, mothers who register for WIC are eligible to receive not just good nutrition, but

parenting education, too. The problem is that most WIC offices are overburdened and the teaching component is often cursory at best. Still, this is a moment to be seized. It's an occasion when mothers can receive essential information regarding good health and child development. And we propose, therefore, that every WIC office sponsor a "parent seminar series," one that covers all dimensions of school readiness, from physical well-being to moral development. The WIC appropriation should be increased to accommodate this expanded educational component.

Health education is essential. Good nutrition for poor mothers and their babies is essential. But we are convinced that the greatest factor in improving the health and learning prospects of children is providing to all mothers quality prenatal care. After all, the period *before* birth is critical. Pregnant mothers simply must have good medical attention, good nutrition, and basic health information beginning in the first trimester. Such care should be guaranteed to all. Since a healthy fetus, by the sixth month, has already developed ten billion neurons, nearly the full number needed for total brain development.<sup>27</sup>

Infants whose mothers do *not* receive adequate health service during pregnancy are more likely to be physically at-risk, intellectually deficient and restricted in their capacity to learn.<sup>28</sup> Yet, one-quarter of all pregnant women in the United States receive belated prenatal care, or none at all.<sup>29</sup> Further, the percentage of women receiving substandard care has actually been growing.<sup>30</sup> Author Lisbeth B. Schorr in commenting on this crisis observed: "The United States is virtually alone among nations—and absolutely alone among Western industrial democracies—in its grudging approach to the provision of maternity care. Government in the United States has . . . never assumed responsibility for assuring that every pregnant woman gets the health care she needs to maximize the chances of a healthy birth."<sup>31</sup>

The most formidable barrier to good health care is cost. Medicaid, authorized by Congress in 1965, provides health coverage for 27.3 million people. And yet, more than nine million women of reproductive age have no health insurance of any kind.<sup>32</sup> In addition, even though Medicaid coverage has been expanded to include young children, there are still 1.5 million children under the age of six not covered by this or any other program.<sup>33</sup> Clearly, universal health insurance is essential.

But even if some form of health insurance were made universally available, the reality is that millions of women and children still would remain medically unserved because of the current chaotic *delivery* system, which makes access so shockingly uneven. In rural areas, for example, where 20 percent of Americans reside, hundreds of health clinics have closed in recent years<sup>34</sup> and prenatal care is, for many, miles away—or nonexistent.<sup>35</sup> In George, for example, 92 counties had no obstetrician, 40 counties have no hospital, and 13 counties have no family physician, according to a state directed survey. "In many rural communities of Michigan mothers may have to travel a hundred miles or more to get prenatal care." According to Veda Sharp of the Michigan Department of Health even in large cities, with their sprawling medical centers and well planned physicians, health care in the poorest neighborhoods has actually decreased in the past twenty years, leaving many low-income mothers with no place to go.<sup>36</sup>

This is inexcusable. It's unacceptable that the wellness of mothers and babies is so closely tied to wealth. Providing access to basic health care for all mothers and their children must become a top priority for the nation, a position vigorously promoted by the National Governors' Association, the governors declared: "If steps are not taken now to build a real health-care system, too many children will continue to come to school unprepared to learn, too many adolescents will continue to face serious but preventable health problems."<sup>37</sup>

As a major move in the ready to learn campaign, we call for a national network of "one-stop shopping" health and education centers to serve all low-income mothers and children. These centers, called—Ready-to-Learn Clinics—would integrate health, education, and social services, building on the current system but making them more equitable and more accessible to all.

Marian Wright Edelman, president of the Children's Defense Fund, states with urgency the challenge America confronts: "Children must have their basic needs for health care . . . and nutrition met if they are to be prepared to achieve in school. A child with an undiagnosed vision problem, or without the means to get glasses once a problem has been diagnosed, hardly can learn to his potential. A child whose intellectual development is stunted by lead poisoning cannot excel in the classroom. . . . Nor can a hungry child. . . . All of this is common sense. Any parent, any teacher, any doctor, any politician understands these connections. The puzzling thing is why we can't do what we all know makes sense, giving all children the essential and cost-effective early investments they need to prepare them to achieve."<sup>38</sup>

Creating a *national* network of Ready to Learn clinics—one that pulls together and extends the existing, fragmented "system" would, at first blush, appear to be a seem to be a hugely complicated task. But this is something America can and must do. Let's not forget that we created in this country a network of public schools—eighty-three thousand of them from Bangor, Maine, to Honolulu, Hawaii, serving more than forty-six million children. This was accomplished precisely because the citizens of this country shared the conviction that educating every child was far too important to be left to chance.

Clearly, the time has come for America to create a "common" network, modeled after the "common" schools. Today, no one would tolerate a fragmented, rule of public education, one system in which some children went off to school each morning while others had no place to go. How, then, can we tolerate, year after year, a broken system of health care that denies access to millions of our children? After all, health is a *prerequisite* to education?

A Ready-to-Learn Clinic which would blend health care and education would offer a care service, prenatal and maternal care, as well as health services to children up to age five, including regular checkups, routine screening for hearing and vision problems, and testing for lead poisoning, which the American Academy of Pediatrics recently labeled an "epidemic."<sup>39</sup> And protecting every child against childhood diseases through inoculation would be crucial. Indeed, it is truly shocking that 20 percent of preschool children in this country have not been vaccinated against polio, that the incidence of whooping cough is three times higher than it was a decade ago, and that the reported cases of measles has skyrocketed to more than twenty-six thousand in 1990.<sup>40</sup> Surely, this nation can accomplish something as simple and as essential as protecting every child against contagious illness (table 4).

Table 4  
Preschool Children Who Have Completed Immunizations

	<u>Year</u>	<u>DTP</u> <sup>41,42</sup>	<u>Measles</u> <sup>43</sup>	<u>Polio</u> <sup>44,45</sup>
United States	1985	64.9%	60.8%	55.3%
Belgium <sup>46</sup>	1987	95.0	90.0	99.0
Denmark	1987	94.0 <sup>47</sup>	82.0	100.0
France <sup>48</sup>	1986	97.0	55.0	97.0
Germany (FRG) <sup>49</sup>	1987	95.0	50.0	95.0
The Netherlands	1987	96.9	92.8	96.9
Norway	1987	80.0	87.0	80.0
Spain	1986	88.0	83.0	80.0
Switzerland	1986	90-98	60-70	95-98
England and Wales	1987	87.0 <sup>50</sup>	76.0	87.0

SOURCES: Bytchenko, 1988; USPHS, 1989; National Statistics Offices (Denmark, Netherlands, England, and Wales).

The Ready-to-Learn clinic would give attention to parent education and also serve as a referral center, working collaboratively with WIC and surrounding educational institutions, such as Head Start and the public schools and, of course, other public and private health and social agencies in the region. Indeed, the proposed Clinics might well be located at or near a public school since health and education are so closely linked. Further, schools are found in every neighborhood. They have wide public trust and to have a health service close by would benefit both institutions. An interagency advisory council might be formed to ensure that the various institutions work together toward common goals.

We are convinced that states should take the initiative in creating Ready to Learn Clinics, just as they led the way in building a national network of public schools. And to begin the process, a county-by-county Maternal and Child Health Master Plan, one that would include: First, an inventory of the number of low-income mothers and

116

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SOURCE: National Health/Education Consortium, The Metropolitan Life Insurance Foundation.

Educating today's students—tomorrow's parents—is a long-term strategy, one that must get started now. Meanwhile, to achieve readiness for all, another crisis—poor nutrition among at-risk mothers and babies—also requires immediate attention. The reality is that if a pregnant woman does not eat well her nutritional deficiency can interfere with the fetus' development, increasing the possibility that the baby will be malformed or mentally or physically retarded.<sup>21</sup> Yet, in the United States today, literally hundreds of thousands of expectant mothers are undernourished and it's also a depressing fact that millions of preschool children go day after day without the nutrition they need for good health and effective learning.

How should we proceed? The federal food program, called WIC, was signed into law in 1972, precisely to meet the nutritional needs of poor women, infants, and children. Milk, cheese, eggs, cereal, and baby formula are distributed monthly through eight thousand service centers across the country.<sup>22</sup> And currently nearly five million low-income women and their children are being served.<sup>23</sup>

Further, WIC is effective. It has proven to be successful in bringing mothers into prenatal care during the first trimester of pregnancy, in reducing infant mortality, in raising birthweights, and later, in improving the educational performance of children.<sup>24</sup> It's a solid economic investment, too. A recent study found that every dollar we invest in WIC saves four dollars or more in medical costs alone.

But what's so hard to accept is that despite WIC's demonstrated record of success, only 55 percent of those eligible are now being served, leaving vast numbers undernourished. How can we live comfortably with the fact that year after year millions of mothers and children in this country fail to receive even the minimum food supplements they require. Surely the time has come in America to guarantee that all of the nation's mothers and babies will be well fed to help achieve this goal. We propose that WIC be fully funded—increased from \$2.4 to \$4.5 billion.<sup>25</sup> This is a moral imperative. As Winston Churchill said on one occasion, "there is no finer investment for any community than putting milk into babies."<sup>26</sup>

We also recommend, as yet another part of the ready to learn campaign, that the educational component of WIC be strengthened. According to existing regulations, mothers who register for WIC are eligible to receive not just good nutrition, but

parenting education, too. The problem is that most WIC offices are overburdened and the teaching component is often cursory at best. Still, this is a moment to be seized. It's an occasion when mothers can receive essential information regarding good health and child development. And we propose, therefore, that every WIC office sponsor a "parent seminar series," one that covers all dimensions of school readiness, from physical well-being to moral development. The WIC appropriation should be increased to accommodate this expanded educational component.

Health education is essential. Good nutrition for poor mothers and their babies is essential. But we are convinced that the greatest factor in improving the health and learning prospects of children is providing to all mothers quality prenatal care. After all, the period *before* birth is critical. Pregnant mothers simply must have good medical attention, good nutrition, and basic health information beginning in the first trimester. Such care should be guaranteed to all. Since a healthy fetus, by the sixth month, has already developed ten billion neurons, nearly the full number needed for total brain development.<sup>27</sup>

Infants whose mothers do *not* receive adequate health service during pregnancy are more likely to be physically at-risk, intellectually deficient and restricted in their capacity to learn.<sup>28</sup> Yet, one-quarter of all pregnant women in the United States receive belated prenatal care, or none at all.<sup>29</sup> Further, the percentage of women receiving substandard care has actually been growing.<sup>30</sup> Author Lisbeth B. Schorr in commenting on this crisis observed: "The United States is virtually alone among nations—and absolutely alone among Western industrial democracies—in its grudging approach to the provision of maternity care. Government in the United States has . . . never assumed responsibility for assuring that every pregnant woman gets the health care she needs to maximize the chances of a healthy birth."<sup>31</sup>

The most formidable barrier to good health care is cost. Medicaid, authorized by Congress in 1965, provides health coverage for 27.3 million people. And yet, more than nine million women of reproductive age have no health insurance of any kind.<sup>32</sup> In addition, even though Medicaid coverage has been expanded to include young children, there are still 1.5 million children under the age of six not covered by this or any other program.<sup>33</sup> Clearly, universal health insurance is essential.

But even if some form of health insurance were made universally available, the reality is that millions of women and children still would remain medically unserved because of the current chaotic *delivery* system, which makes access so shockingly uneven. In rural areas, for example, where 20 percent of Americans reside, hundreds of health clinics have closed in recent years<sup>34</sup> and prenatal care is, for many, miles away—or nonexistent.<sup>35</sup> In George, for example, 92 counties had no obstetrician, 40 counties have no hospital, and 13 counties have no family physician, according to a state directed survey. "In many rural communities of Michigan mothers may have to travel a hundred miles or more to get prenatal care." According to Veda Sharp of the Michigan Department of Health even in large cities, with their sprawling medical centers and well planned physicians, health care in the poorest neighborhoods has actually decreased in the past twenty years, leaving many low-income mothers with no place to go.<sup>36</sup>

This is inexcusable. It's unacceptable that the wellness of mothers and babies is so closely tied to wealth. Providing access to basic health care for all mothers and their children must become a top priority for the nation, a position vigorously promoted by the National Governors' Association, the governors declared: "If steps are not taken now to build a real health-care system, too many children will continue to come to school unprepared to learn, too many adolescents will continue to face serious but preventable health problems."<sup>37</sup>

As a major move in the ready to learn campaign, we call for a national network of "one-stop shopping" health and education centers to serve all low-income mothers and children. These centers, called—Ready-to-Learn Clinics—would integrate health, education, and social services, building on the current system but making them more equitable and more accessible to all.

Marian Wright Edelman, president of the Children's Defense Fund, states with urgency the challenge America confronts: "Children must have their basic needs for health care . . . and nutrition met if they are to be prepared to achieve in school. A child with an undiagnosed vision problem, or without the means to get glasses once a problem has been diagnosed, hardly can learn to his potential. A child whose intellectual development is stunted by lead poisoning cannot excel in the classroom. . . . Nor can a hungry child. . . . All of this is common sense. Any parent, any teacher, any doctor, any politician understands these connections. The puzzling thing is why we can't do what we all know makes sense, giving all children the essential and cost-effective early investments they need to prepare them to achieve."<sup>38</sup>

Creating a *national* network of Ready to Learn clinics—one that pulls together and extends the existing, fragmented "system" would, at first blush, appear to be a seem to be a hugely complicated task. But this is something America can and must do. Let's not forget that we created in this country a network of public schools—eighty-three thousand of them from Bangor, Maine, to Honolulu, Hawaii, serving more than forty-six million children. This was accomplished precisely because the citizens of this country shared the conviction that educating every child was far too important to be left to chance.

Clearly, the time has come for America to create a "common" network, modeled after the "common" schools. Today, no one would tolerate a fragmented, rule of public education, one system in which some children went off to school each morning while others had no place to go. How, then, can we tolerate, year after year, a broken system of health care that denies access to millions of our children? After all, health is a *prerequisite* to education?

A Ready-to-Learn Clinic which would blend health care and education would offer a care service, prenatal and maternal care, as well as health services to children up to age five, including regular checkups, routine screening for hearing and vision problems, and testing for lead poisoning, which the American Academy of Pediatrics recently labeled an "epidemic."<sup>39</sup> And protecting every child against childhood diseases through inoculation would be crucial. Indeed, it is truly shocking that 20 percent of preschool children in this country have not been vaccinated against polio, that the incidence of whooping cough is three times higher than it was a decade ago, and that the reported cases of measles has skyrocketed to more than twenty-six thousand in 1990.<sup>40</sup> Surely, this nation can accomplish something as simple and as essential as protecting every child against contagious illness (table 4).

Table 4  
Preschool Children Who Have Completed Immunizations

	<u>Year</u>	<u>DTP<sup>41,42</sup></u>	<u>Measles<sup>43</sup></u>	<u>Polio<sup>44,45</sup></u>
United States	1985	64.9%	60.8%	55.3%
Belgium <sup>46</sup>	1987	95.0	90.0	99.0
Denmark	1987	94.0 <sup>47</sup>	82.0	100.0
France <sup>48</sup>	1986	97.0	55.0	97.0
Germany (FRG) <sup>49</sup>	1987	95.0	50.0	95.0
The Netherlands	1987	96.9	92.8	96.9
Norway	1987	80.0	87.0	80.0
Spain	1986	88.0	83.0	80.0
Switzerland	1986	90-98	60-70	95-98
England and Wales	1987	87.0 <sup>50</sup>	76.0	87.0

SOURCES: Bytchenko, 1988; USPHS, 1989; National Statistics Offices (Denmark, Netherlands, England, and Wales).

The Ready-to-Learn clinic would give attention to parent education and also serve as a referral center, working collaboratively with WIC and surrounding educational institutions, such as Head Start and the public schools and, of course, other public and private health and social agencies in the region. Indeed, the proposed Clinics might well be located at or near a public school since health and education are so closely linked. Further, schools are found in every neighborhood. They have wide public trust and to have a health service close by would benefit both institutions. An interagency advisory council might be formed to ensure that the various institutions work together toward common goals.

We are convinced that states should take the initiative in creating Ready to Learn Clinics, just as they led the way in building a national network of public schools. And to begin the process, a county-by-county Maternal and Child Health Master Plan, one that would include: First, an inventory of the number of low-income mothers and

students, for example—to help with parent education, and transportation. Home visits surely should be a central feature of the program and clinics should focus on training parents who in turn would teach other parents what they have learned.

Coordination of health services is an idea whose time has come. Still more state and local funds will be needed to expand ready to learn services at existing county clinics, hospital and independent health centers. Again, the goal is to build facilities now in place.

Further, funding from the federal program also should be increased. Currently states receive 530 million from the Community and Migrant Health Centers program which supports 2,000 clinics for needy clients from coast to coast. The Maternal and Child Health Block Grant program gives 500 million annually to states to help fund local clinics as a basis. We recommend that states receive additional funds from these programs only after the need has been clearly documented based on the community by community inventory.

A Houston program called "De Madres a Madres"—from mothers to mothers—uses women as volunteers who have received eight hours of intensive training. In a barrio where 40 percent of the pregnant women do not start prenatal care early enough, or fail to start at all. Currently, fifty women—bank clerks, waitresses, and school cafeteria staff have contacted three thousand pregnant women, visiting them in their homes, guiding them to prenatal care, accompanying them to fill out papers, and helping them keep up their spirits.

Results are impressive. Among the clients the De Madres a Madres program has tracked, not one has had a low-birthweight baby, and in their next pregnancy most begin prenatal care much earlier. Texas Woman's University initiated the program, but trains volunteers.

Recruiting enough trained professionals also will be a special challenge. But here again, the federal government can help. Since 1970, the National Health Service Corps has given scholarships and loans to students, physicians, nurses, and other health care providers—about thirteen thousand doctors, nurses, and other professionals—who agree to work in underserved communities after training.<sup>51</sup> Recently, due to budget cuts, the number of program participants has dramatically declined. In order to provide basic health care for all mothers and babies—the quality of the ready to learn

clinics—we recommend that National Health Service Corps funds be expanded. We also urge that special priority be given to the recruitment and training of professional midwives and nurse-practitioners who can provide quality maternal and child care.

"One-stop health clinics" of the sort we have in mind are now widely recognized as the only way to go. Just two years ago President Bush signed into law a new program that is almost precisely the kind of integrated service proposed in the ready to learn clinic. The federally-funded six-year project called the Comprehensive Child Development program, calls for one-stop service centers. The core of services for children: health care including screening, immunization, treatment and referral, early detection programs, and nutritional services. Child care affiliated with the program must meet high-quality standards. For parents the services include: prenatal care, parent education, and referral services. At present, there are some 24 cities throughout the country located mainly in community agencies that are attempting to integrate services. Appropriations for the first year of this federal initiative in 1989 were \$25 million, and another \$20 million were recently added to include an additional 21 sites all stressing early intervention for at-risk youth and their mothers by better integrating a variety of services. But we believe that such a project should be expanded so that more communities can benefit from such an effort.

Further, literally hundreds of specific programs can be found from coast to coast. The Jackson-Hinds Comprehensive Health Center in Jackson, Mississippi provides primary care services, acute sick-care, screening, and immunization to about four thousand preschoolers every year. The Center provides prenatal care and delivery, a birthing center, and nutrition counseling, as well as referrals to drug and alcohol treatment centers. A satellite health clinic located in a local high school is regarded as a model in community health care. But according to Dr. Aaron Shirley, the clinic's budget has been frozen for the last five years, at the same time that they are "seeing more and more patients in poverty who can pay only 20 to 40 percent of the actual costs, if that much. Poverty is increasing, but our funding is staying the same. Also, medical costs are rising. Our equipment is twenty years old, but we don't have enough money to make capital improvements. We have just enough to keep the door open."<sup>52</sup>

"TW Cares" a community health center is located in a low-income housing project in Denton, Texas, where mostly single mothers and children live. The program was

started two years ago by Texas Woman's University College of Nursing after the public hospital closed, leaving the low-income population with no place to go. Besides providing primary care the program educates families about health and wellness and refers clients to providers of the services they need. If a child is sick they help find a doctor. If cases of abuse or neglect arise, they bring families into appropriate programs run by the police and the department of human services. There is also a dental clinic on-site where last year \$30,000-worth of services were donated. TW Cares works intimately with the local school, where one-third of the children are without insurance; and therefore rely on the school nurse for help.

The first step in a national ready to learn campaign is a healthy start for every child. For this to be accomplished better education, good nutrition, and basic health care for all mothers and babies is required. Above all, let's recognize that providing such services is not a cost, but an investment, one that must be started now. "We absolutely cannot afford to wait until the school bell rings to attend to our children's health," is the way National Health Education Consortium put it. "We need to start thinking of immunizations, well-child care and health screenings, proper food, and prevention of health problems as being just as important to education as books and pencils and chalkboards and teachers. We need to act swiftly—and we need to act boldly. There is no time to waste."<sup>53</sup>

## NOTES

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