

## **Bridging the treatment gap: Mass school-based deworming**

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Mr. Chairman, members of the committee:

My name is Alix Zwane. I am executive director of the Deworm the World Initiative, a consortium of organizations which actively support the scale-up of school-based deworming programs worldwide to improve children’s health, education, and long-term development. I come to my leadership role with the initiative because I am the executive director of Evidence Action, a non-governmental organization working to scale proven interventions to improve the lives of the poor in Africa and Asia, that is the lead member of the consortium.

The Deworm the World Initiative (DtW) was launched at the 2007 World Economic Forum in Davos, Switzerland to expand school-based deworming programs. School-based deworming is now recognized as one of the smartest and most cost-effective investments by leading academic centers, including our partner Innovations for Poverty Action, the Copenhagen Consensus Center, and the Jameel Poverty Action Lab at MIT. This year, DtW has helped our government partners provide deworming treatment to over 35 million children in Kenya and India.

DtW expands school-based deworming by strategically supporting governments and development partners to launch, strengthen and sustain large-scale programs. This support includes:

- Increasing capacity of governments and other partners to implement national or state level school-based deworming by providing tailored technical assistance for all programmatic phases, from planning through to monitoring and evaluation.
- Facilitating resources and partnerships to provide the financial, technical and in-kind inputs to scale up and sustain school-based deworming programs.
- Generating commitment to high quality, large-scale school-based deworming programs by advocating with policymakers, donors and other stakeholders.

My testimony offers recommendations on means to bridge the treatment gap in mass drug administration for the treatment of soil transmitted helminths, Schistosomiasis and other intestinal parasites. I do not focus primarily on a plea for a large infusion of donor resources.

Thanks to generous drug donation programs by our pharmaceutical company partners, including Johnson&Johnson, the quantity of available drugs currently outstrips programmatic demand. Our experience suggests that targeted, catalytic investments can be hugely beneficial. Nor do I focus on calling for additional “political will” from developing country governments. We recognize that our partner governments have many competing priorities and limited budgets; they must make hard choices even with the very best of intentions. I highlight instead how the gap between service need and service delivery can be bridged by:

- Bringing useful, but non-intuitive, knowledge to the attention of policymakers;
- Sharing practical and targeted lessons about best practices in implementation via technical assistance that leverages and unlocks government funds;
- Reducing the knowledge gap. If our government partners, and our donor partners, understood better how long a commitment to mass treatment is warranted, it would be easier to dedicate resources for a discrete period of time.

### **A strategic approach to expand school-based deworming and bridge the treatment gap**

Over 400 million at-risk school-age children remain without treatment for intestinal worms due to the challenges in scaling deworming programs. There are several reasons for which current efforts fall short of global deworming targets, including why new programs aren’t being established fast enough or existing programs have yet to achieve their full potential.

School-based deworming programs, which are often designed to reach preschool-age populations as well, target the segments of the population that typically carry the highest worm burden. These programs leverage the existing and extensive infrastructure of schools, employing teachers to safely administer treatment with support from the local health system and efficiently reaching large numbers of children.

DtW works to overcome the specific challenges to expanding school-based deworming programs through the provision of strategically identified support to government implementers. Support is tailored to the needs of each program, and the barriers to expanding high quality treatment identified above.

**Sharing evidence** The magnitude of the benefits from deworming are striking. Rigorous evidence demonstrates that school-based deworming can transform the lives of children over the short and long term. A 2007 study that measured the impact of an early 20th century hookworm eradication effort by the Rockefeller Foundation in the southern United States found treatment to increase school enrollment, school attendance, and literacy. A randomized trial in Kenya in the early 2000s found school-based deworming reduces school absenteeism by 25%. By tracking these children over the long-term, this study revealed that adults who had received 2.5 additional years of deworming as children worked 12% more hours and earned 20% more when in wage-employment as adults.

Sharing these results as part of a larger package of services, or a structured engagement on evidence-based policymaking more generally, can help decisionmakers prioritize investments so that their scarce resources stretch further.

**Increasing capacity** of governments to implement school-based deworming by providing tailored technical assistance for all programmatic phases, from planning through to monitoring and evaluation, can make a path to sustainable, scalable services less daunting and more politically palatable. The kind of support needed includes:

- Conducting national surveys to map which areas of the country have high levels of worm infection.
- Creating operational plans and budgets that target high burden areas.
- Designing program processes and materials for training teachers, distributing deworming medicine, generating public / community awareness, and collecting program data.
- Coordinating implementation logistics and systems for effective program coverage at scale.
- Developing monitoring and evaluation systems to reliably assess and capture program performance, and analyzing information to continuously refine programs for improved quality, cost and coverage.

Joint ownership across ministries of education and health is crucial to school-based deworming, and DtW helps to cultivate this partnership through facilitating the set-up of joint steering committees and working with ministry teams to outline respective roles and responsibilities. DtW also identifies opportunities to partner with other synergistic organizations or programs, such as hand-washing campaigns or micronutrient initiatives. By leveraging other programs and unlocking government resources by pointing the way to success, donor support for technical assistance in school-based deworming can be a highly leveraged form of support for child health.

**Reducing the knowledge gap** Thanks to investments by USAID, the Bill & Melinda Gates Foundation, the Children's Investment Fund Foundation, and others, we understand increasingly well the benefits from deworming and the means by which cost-effective treatment can be achieved. However, we continue to face uncertainty about the necessary duration of mass treatment, especially as sanitation coverage changes and incomes rise. Do governments sign on to a mass treatment campaign for five years or ten years when they begin? Our experience tells us that uncertainty about this question makes risk averse officials hesitant to act. Of course, it is precisely a lack of experience with sustained mass treatment that is partly responsible for our uncertainty about its long run effectiveness as part of a control strategy. The knowledge gap and treatment gap reinforce each other. Increased effort to understand how treatment strategies should change over time would be enormously beneficial to organizations dedicated to treatment and our collective goals around scale.

## **Summary and conclusion**

Our experience in the Deworm the World Initiative suggests that supporting the activities I have discussed here can specifically address the political, technical, and managerial challenges to expanding deworming programs. The result of these efforts is programs that quickly, efficiently, and reliably deliver deworming medicine to millions of children each year at a cost that is less than \$0.50 per child per year. This is one of the most cost-effective means of improving educational outcomes for children in developing countries that we know and expanding its reach is well within our grasp.

Thank you for your attention and the opportunity to be here today.