REPORT

Evidence Based Family Wellness Interventions, Still Not HIV Prevention: Reply to Collins

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Dr. Collins's outline of the challenges for advocates of a Family Wellness perspective highlight the many similarities in our suggestions, as well as some intractable challenges that have faced public health providers and policy makers for the last century. We were unclear on several points and would like to clarify our intentions below in repsonse to the problems Dr. Collins has outlined.

Horizontally integrate prevention services into one site locally, with priorities tailored to local health challenges and managed by local community leaders

Collins points out the lack of capacity at local levels in almost all of the developing world and the United States to implement prevention services. We were unclear in our presentation. While we argue that services need to be delivered locally in one site, we endorse the need for service packages, training systems, and infrastructure to be designed centrally, where the capacity is the greatest. Diagonal integration (Frenk 2006; Ooms et al. 2008; Uplekar and Raviglione 2007) is the correct description for such a system. The diagonal approach intends to leverage disease-specific program funding to build capacity in local health systems that generalize to a variety health challenges. Figure 1 from Ooms et al. (2008) outlines the benefits and costs of horizontal, vertical, and diagonal

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approaches to strengthening health systems. We intended to communicate the importance of integrated delivery at the local level, particularly in rural sites. However, we share with Dr. Collins and the work of previous public health providers that recognizes the lack of local capacity. There have been global examples of such successful integration: the system of barefoot doctors in China; the health monitoring system in Thailand; and the prevention services in Australia for high risk youth.

Typically, diagonal integration is discussed in the context of macro-structural funding for global health infrastructure. However, we believe these principles generalize to dissemination of evidence-based prevention, as well. Our proposals for disseminating EBI based on common elements (i.e. factors, processes, principles) found across EBI, is congruent with a diagonal approach. If EBI were disseminated and adapted based on a common language and framework that reflects the common elements of all effective programs or practice, then the local capacities that are built while disseminating disease-specific EBI could be more easily generalized and translated to a variety of local health challenges.

Currently, we are trying to assess whether EBI for preventing obesity, heart disease, substance abuse, and HIV share the same common elements. Riggs et al. (2007) has demonstrated that a program originally designed for violence and substance abuse prevention for adolescents could be adapted into an efficacious obesity prevention program: impulse control, decision-making, and social competence were the key proximal intervention targets for improvements in HIV, diet and physical activity. The intervention elements were common across the adaptations, only the disease-specific focus and content was different. From our HIV prevention experience, we recognize that the same intervention elements can be efficaciously applied to



The "vertical approach"

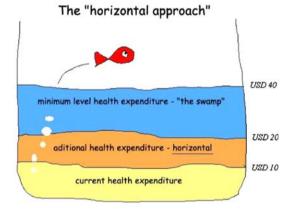




Fig. 1 Comparison of vertical, horizontal, and diagonal integration in health expenditure and capacity (from Ooms and Bestgen 2008 in Ooms et al. 2008)

sexual behaviors, substance use, medical adherence, and quality of life. Thus, it seems feasible to build or adapt EBI using a common framework that is adaptable to multiple disease behavioral targets. Whether or not this can be done effectively in practice with local providers remains to be determined.

Recently the World Health Organisation (2008) has recommended "task shifting" HIV prevention services away from highly trained healthcare workers to paraprofessional workers with less training and fewer qualifications in order to meet the increasing demands put on stressed healthcare human resources. The CDC's DEBI initiative is consistent with this recommendation by supporting local CBOs and their staff to deliver prevention, rather than medical providers. This approach has been extended outside of the U.S. through international partnerships.

However, we believe the global needs for rapid and broad expansion of prevention services, and the human resources needed to deliver them, will require a new model for intervention development, dissemination, training, and adaptation. We need a disruptive innovation (Christensen et al. 2000; Christensen 2007) in global prevention for HIV and other local priorities where good enough solutions can reach much larger populations, faster, with increased potential for sustainability, and more easily adaptable to changing conditions and priorities over time.

We suggest that using a common elements framework for adapting and developing prevention programs, applied to a community's top three health prevention priorities, holds strong potential to be a disruptive innovation in effective prevention dissemination. Most communities have only a few big-ticket prevention priorities. Three prevention priorities are likely to be trainable to paraprofessionals in CBOs using a common elements framework. Information and communication technologies, such as mobile phones and the internet, can support such an approach by extending reach and lowering the costs to train, deliver, and sustain programs. Again, as Collins suggests, with reference to horizontally integrated community participation models generally, research is needed to identify if our proposals can help overcome challenges to maintaining efficacy. Collins' recognition that both horizontal and vertical approaches exist and are needed suggests that a diagonal integration perspective can support innovative solutions to these challenges.

Wellness, embedded in families' healthy daily routines, prevents HIV and other diseases requiring changes in behavior

Dr. Collins' outline of the Parents Matter program is highly consistent our suggestion that HIV prevention be embedded in Family Wellness programs that help parents anticipate, educate, and help their children build skills to cope with health challenges. As parents build their children's skills, parents are simultaneously helping to build skills to improve their own health. We find Collins' description of the Adult Identity Mentoring (AIM) intervention for adolescents to be remarkably consistent with components embedded in many REP and DEBI programs (Street Smart, TLC, CLEAR, Safety Counts, Project Light, Focus on Kids). While we recognize that not all prevention



can be delivered to families, our point is that much more emphasis should be placed on early prevention in a family context, before small problems evolve into high-risk behaviors, such as with Parents Matter.

However, at a broader level, globally scaling HIV prevention along with other local prevention priorities under a Family Wellness frame can potentially overcome the stigma associated with HIV prevention framed around high-risk behaviors, which is a significant barrier to participation in HIV prevention programs.

Implementing EBI based on common principles, factors, and processes, rather than replication of specific programs

As Dr. Collins highlights, the success of the DEBI programs nationally has been substantial and significant. However, DEBI could do even better by creating a language that will help researchers standardize which and how core elements and key characteristics are specified. Even more, the best in training protocols are not yet defined. In our articles, we created new labels of "principles", "factors", and "processes" only to suggest more precise constructs of what core elements seem to reflect in the DEBI and REP programs. Because researchers do not often choose to assess common mediators across programs, conduct functional analyses of the activities within their EBI, or describe the principles of best practice, the DEBI and REP core elements and key characteristics vary widely in how and what they define. While DEBI, in particular, under the effective leadership of Collins and colleagues, has broadly encouraged adaptation, communities often wonder how, when, and exactly which aspects of the intervention can be adapted. We reassert that the current REP and DEBI criteria vary widely in definition and are not clear to providers, similar to concerns of Dworkin et al. (2008).

The list of potential common elements that our recent research has generated is not likely to be definitive. We aim to initiate a debate on how to identify and build on the similarities and common features of the HIV-related EBI, which the US federal government has wisely invested in developing and diffusing over the last 25 years. There can be a next stage in the definition of core elements and key characteristics, which will stimulate a new generation of EBI which could and should be more effective and more targeted because of the advances of the last 25 years.

We agree with Dr. Collins that CDC and other federal agencies, rather than individual researchers or research groups, are the best to pursue these issues. We advocate for CDC to tightly define and create a common framework and language for researchers, policy makers, and providers to

discuss not only our work in HIV prevention, but also to enhance broad diffusion of EBI to local communities in other health areas. We envision a comprehensive research agenda that integrates the work of the CDC meta-analytic teams (e.g., Lyles et al. 2006), EBI manual analyses (e.g. Rotheram-Borus et al. 2008) but also combined with expert consensus processes (e.g. Chorpita et al. 2005), and strongly influenced by the practical considerations of providers and policy makers. Relying on the investigator who designs a specific EBI to identify the core elements and key characteristics (Eke et al. 2006) limits the field's ability to understand how and when to select a particular intervention and its components. If a consensus process is led by federal agencies, the field will move quickly to adopt the framework, jump-starting a new generation of HIV prevention EBI in new areas, and as new biomedical applications emerge.

Utilizing the expertise of private enterprise to re-design EBI into highly attractive, engaging, and accessible experiences

We applaud CDC's media-based interventions and agree that much more is needed. However, we were referring to a model of intervention design that emerges when the "market" and the "consumer" is considered. Theory and efficacy have been the primary forces driving development and selection of EBI for federal funding. In private enterprise, the market and consumer come first, with the goal of uptake being even more important than impact. All existing EBI are aimed at providers for delivery: yet providers' capacities, funding streams, and preferences were not the primary consideration in designing interventions. Consumer's preferences were similarly less important in designing interventions. We would never have labeled any EBI as "HIV prevention" if these preferences had been considered: HIV has consistently been linked to stigma, death, and illness over time. We under-utilize the strategies that have created innovations at firms like IDEO or in the Defense Department to reach their audience and to achieve long-term impact on behavior. Designing EBI that are "pulled" by market forces for behavior change, rather than having to "push" our innovations into broad usage means far different evaluation criteria in awarding federal grants and research designs.

A good example of change in the EBI design process would be for each existing DEBI and REP program to be available for efficacious delivery in multiple formats: mobile phones, internet, individual meetings, small groups, DVD, and CD. Rather than each EBI custom building their own complete program, we envision pre-fabricated components or modules which are diverse in delivery formats,



intensity, and can be tailored by local providers; similar to the explosion of improvements in technology when a field is opened to innovation (Estrin 2008). HIV prevention needs innovation and disruptive innovations to jump-start our rapid and broad diffusion of EBI so that we do not take 20 years to design, validate, replicate, adapt, and disseminate EBI. Successful innovations in the world of private enterprise are often adopted on an exponential curve: we need to learn from private enterprise how to design in similar ways for positive health outcomes.

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References

- Chorpita, B. F., Daleiden, E. L., & Weisz, J. R. (2005). Identifying and selecting the common elements of evidence based interventions: A distillation and matching model. *Mental Health Services Research*, 7(1), 5–20. doi:10.1007/s11020-005-1962-6.
- Christensen, C. M. (2007). Disruptive innovation: Can health care learn from other industries? A conversation with Clayton M. Christensen. Interview by Mark D. Smith. *Health Aff (Millwood)*, 26(3), w288–w295. (Epub 2007 Mar 13).
- Christensen, C. M., Bohmer, R., & Kenagy, J. (2000). Will disruptive innovations cure health care? *Harvard Business Review*, 78(5), 102–112.
- Dworkin, S. L., Pinto, R. M., Hunter, J., Rapkin, B., & Remien, R. H. (2008). Keeping the spirit of community partnerships alive in the scale up of HIV/AIDS prevention: Critical reflections on the roll

- out of DEBI (diffusion of effective behavioral interventions). *American Journal of Community Psychology*, 42(1–2), 51–59.
- Eke, A. N., Mezoff, J. S., Duncan, T., & Sogolow, E. D. (2006). Reputationally strong HIV prevention programs: Lessons from the front line. *AIDS Education and Prevention*, 18(2), 163–175. doi:10.1521/aeap.2006.18.2.163.
- Estrin, J. (2008). Closing the innovation gap: Reigniting the spark of creativity in a global economy. New York: McGraw-Hill.
- Frenk, J. (2006). Bridging the divide: Comprehensive reform to improve health in Mexico. Lecture for WHO Commission on Social Determinants of Health, Nairobi, June 29. http://www.who.int/social_determinants/resources/frenk.pdf.
- Lyles, C. M., Crepaz, N., Herbst, J. H., et al. (2006). Evidence-based HIV behavioral prevention from the perspective of the CDCs HIV/AIDS prevention research-Synthesis team. AIDS Education and Prevention, 18(4), 21–31. doi:10.1521/aeap.2006.18.supp.21.
- Ooms, G., Van Damme, W., Baker, B. K., Zeitz, P., & Schrecker, T. (2008). The 'diagonal' approach to Global Fund financing: A cure for the broader malaise of health systems? Globalization and Health, 4, 1–7.
- Riggs, N. R., Sakuma, K. L., & Pentz, M. A. (2007). Preventing risk for obesity by promoting self-regulation and decision-making skills: Pilot results from the PATHWAYS to health program (PATH-WAYS). Evaluation Review, 31(3), 287–310. doi:10.1177/019 3841X06297243.
- Rotheram-Borus, M. J., Swendeman, D., Flannery, D., Rice, E., Adamson, D., & Ingram, B. (2008). Common factors in effective HIV prevention programs. AIDS and Behavior, (Epub ahead of print). doi:10.1007/s10461-008-9464-3.
- Uplekar, M., & Raviglione, M. (2007). The "vertical-horizontal" debates: time for the pendulum to rest (in peace)? *Bulletin of the World Health Organization*, 85, 413–414. doi:10.2471/BLT.07. 041756.
- World Health Organization. (2008). *Task shifting: Global recommendations and guidelines*. http://data.unaids.org/pub/Manual/2007/ttr_taskshifting_en.pdf. Accessed on Aug 10, 2008.

