Diabetes Prevention
The Joslin Diabetes Center

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The diabetes pandemic, driven by the perfect storm of genetic risks, unchecked levels of obesity, poor lifestyle decisions, and inadequate awareness, education, and care, mandates that we embark on new and aggressive solutions for addressing this disease. We need a bold and compelling call to action, and we need to instill the same degree of national prioritization that we would insist on if another invader were to attack our country. We cannot stand by allowing the human devastation and economic pain to continue every day as we watch the diabetes onslaught go on while our leaders debate the merits of preventive care. The best way to get ahead of the oncoming and overwhelming wave of diabetes is to focus on preventing it.

Acknowledging that our global mission is to prevent, treat, and cure diabetes, we at Joslin Diabetes Center recognized this past year that we had not adequately met our responsibility to proactively catalyze and implement better solutions for diabetes prevention. As such, we have fully reinvigorated prevention and wellness as a key priority for Joslin, and we have ensured that it is a major and essential component of our strategic plan. Our commitment to prevention is designed to leverage our core competencies as well as our earlier efforts in the Diabetes Prevention Program and the Look AHEAD (Action for Health in Diabetes) study. We intend to engage and collaborate with like-minded organizations, government agencies, insurers, and others who have been advancing solutions in the prevention and wellness arena. In fact, we intend to work with as many pioneering enterprises, thought leaders, government agencies, payers, and others as possible, because a concerted team effort will be essential to our success. We intend to utilize objective measurements and metrics, coupled with outcomes research, Big Data analytics, and cost/comparative-effectiveness assessment tools, so that we can demonstrate that the programs and resources spent in prevention and wellness are impactful and economically sound.

As we look at the scope of the challenge, which encompasses obesity, diet, exercise, behavioral issues, prediabetic metabolic syndrome effects, genetic risks, and a host of other contributors and confounders, we appreciate that the answers and solutions required will need to be individually adapted and tailored. We know that prevention is not a simple, one-size-fits-all solution, and that we must incorporate the specific needs, health status, ethnicity, education and literacy, family circumstances, language, and culture of each person, as a personalized approach is paramount. At the same time, our approach needs to be scalable, financially sound, easily delivered, sustainable, and meaningful. One practical way to do this is to utilize and leverage technology, connectivity, and mobile apps so that educational efforts, medications, exercise programs, nutrition, and care plan adherence, coupled with behavioral goals, can be monitored, tracked, and adjusted in real time. We need to ensure that consumers, patients, employees, families, and all other pre-authorized stakeholders, using new mHealth approaches, are connected. In this way, we can keep the users actively engaged and fully invested in meeting their health and wellness goals. Motivation and feedback mechanisms are essential for positive achievement, and technology-enabled connectivity, incorporating social media, reminders, behavioral feedback loops, and adaptive health plan retooling and pattern recognition responses are all part of the way forward.

Joslin has been busy assessing, testing, and piloting a variety of ideas and “collaboratories,” as we want to take advantage of our unique opportunity to “test kitchen” numerous potential solutions. The best and most promising can then be advanced and shared with others. We intend to pilot various mobile apps and virtualize our proven, medically based weight management programs so they will work effectively in community- and home-based settings. We are developing obesity and wellness programs for schools, nursing homes, employers, and anyone else who is looking to embrace change. Joslin is opening a new Center for Integrative Health and Wellness that will allow us to collaborate with others in bringing innovative solutions forward in nutrition, exercise, improved oral care, healthy eating, and in providing “diabetes friendly” wellness prescriptions. Our facility renovation efforts include expanding our gymnasium to include a full exercise physiology lab so we can study the impact of exercise on insulin resistance and obesity.
which we hope will lead to new and important insights. Educating people around good choices and better meal options; creating realistic, culturally relevant, and family-oriented meal plans and recipes; and showing how ingredient changes can change glycemic food levels are equally important.

Another plan is to add a number of prevention and wellness topics to our second Diabetes Innovation Summit, which will be held in Washington DC in October 2013. We will help those at risk to understand labels, portion sizes, ingredient substitutes and alternatives, as well as the benefits of fruits, vegetables, and proteins. Joslin is building a metabolic and demonstration kitchen where we can provide hands-on experiences—which will be sharable through YouTube video clips—that will show how we can educate at-risk audiences to use culturally tailored, simple, and easily reproducible recipes and ideas, to stay on plan. We are also working with schools, sports companies, and the food industry to prove that healthy foods, implementable diets, weight-management tools, exercise routines, and healthy habits can be manageable and achievable.

Prevention needs continuous support from employers and other advocates. We plan to create, with three important partners, a new prevention- and wellness-oriented executive education program whereby we will educate and empower senior executives across the country to actively promote changing their employees’ food choices and options in company cafeterias and at employee functions and meetings. Experientially educating the highest-level executives so that they can promote new and exciting food and exercise programs that are specifically targeted to provide their employees with healthy and wholesome choices will certainly lead to positive changes. This proactive approach will translate directly into reduced costs for health care, improved productivity, and less absenteeism as well as foster an attitude in their companies and communities that will deliver a real impact.

A constant emphasis on prevention and wellness must be maintained. Our Joslin Everywhere initiative, which leverages web-, mobile-, and cloud-based health and electronic health record (EHR) capabilities, is essential to keeping our patients and consumers engaged. Prevention requires an around-the-clock commitment, as new life-time habits and resolutions need to be constantly maintained and reinforced. We are confident that over time, success will build upon success. We will continue to move beyond the limit of known expertise to ensure that this critical area of need gets the resources, national attention, and commitment it deserves.

I would ask others to join us in this call to action, as a cohesive and committed collaboration of like-minded institutions and thought leaders will allow us to push for the right changes in our national health policies and practices.

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