Closer Look

MEMORANDUM

CDC officially recognizes three digital versions of the Diabetes Prevention Program - DPS Health, Noom Health, and Omada Health - March 12, 2015

Executive Highlights

- Last week, the CDC officially recognized three digital versions of the National Diabetes Prevention Program (NDPP): DPS Health, Noom Health, and Omada Health. Previously, the CDC only recognized in-person versions of the program.

Last week, the CDC officially recognized three digital versions of the National Diabetes Prevention Program (NDPP): DPS Health, Noom Health, and Omada Health. The news represents major recognition by the government agency, which previously, only recognized in-person versions of the program. We are glad to see the government becoming more forward thinking and hope this bodes well for other digital health interventions going forward.

Omada Health CEO Mr. Sean Duffy told us that 2015 "marks an incredible tipping point" for online versions of the DPP. Interestingly, he emphasized that payers, providers, and patients are all equally challenging groups, and the company is hard at work on all three fronts. Given the challenges of the fragmented US healthcare system, the most challenging part of all may be fitting those three pieces together. Driving awareness is a priority for all three companies at this point - ideally, patients could find the programs on their own, though payers and providers could also direct individuals. We wonder if any features of pharmaceutical marketing and distribution will come into play here, similar to how WellDoc has rolled out its BlueStar app.

Programs like these are needed more than ever, given the 87 million Americans with prediabetes, 90% of whom don't know they have it. Historically, diabetes prevention has perhaps not received the focus it deserves, given the sheer size of the problem, the challenges of scaling the DPP, and the incentives in the US healthcare system (e.g., short-term focused payers, time-strapped providers). Moving forward, we hope to see more pilots and new diabetes prevention approaches, whether online or in-person. As Amazon CEO Jeff Bezos says in the new book Bold, "I think the amount of useful invention you do is directly proportional to the number of experiments you can run per week per month per year." Are we doing enough experiments in diabetes prevention? To date, it has not felt like it.

- **Despite its success in preventing diabetes, the DPP study was criticized for requiring significant financial and personnel resources** to carry out the educational curriculum. As a reminder, the original DPP had one-on-one coaching. These online versions of DPP can deliver the same proven clinical intervention, but at much lower cost and much wider scale. This is of course one of the biggest promises that comes with digital delivery of healthcare interventions.
    - **In follow-up translation of the DPP, some have focused on group-based delivery (e.g., YMCA, Omada) as one approach to lowering costs.** This brings the advantage of group support and allows one person to care for many individuals.
    - **On the other hand, DPS Health has retained the original model of an assigned coach, but with the ability to deliver the curriculum at very large scale** (20,000 already served) - the majority of the education, goal setting, monitoring and tracking from the original DPP is automated. Individuals have an assigned coach who provides support but requires only a few minutes per week. Said DPS Health's Chief Medical Officer Dr. Neal Kaufman, "A single clinician can care for large numbers of people one at a time." Similar to

this, ALR Technologies' Insulin Dose Adjustment Consultation (IDAC) system offers remote insulin dosing consultations through an endocrinologist's practice, with the goal of helping multiple PCPs more efficiently.

- **Dr. Kaufman shared with us that many payers are not seeing the benefits of targeting "emergent/moderate risk" individuals.** The fundamental challenge is the cost per person - people with prediabetes are not the most expensive people in the health system. Dr. Kaufman roughly estimated the cost of a healthy Medicare patient at ~$1,000 per year, which rises to ~$10,000 per year in those at moderate risk. The very sickest, by contrast, cost ~$100,000 per year. To date, large payers have focused on the very sickest group, which stands to save significant dollars by keeping heart failure patients out of the hospital, etc. However, there is a tipping point where targeting a much larger number of moderate risk individuals (e.g., prediabetes) will save enough money to provide a positive return on investment in one or two years. The key is a scalable intervention that can save costs in these populations. Dr. Kaufman believes the DPS Health model is the most scalable of the three approaches, as most of the system is automated.
    - **United Health (Optum) has taken the payer lead on diabetes prevention.** The company has really created the market and used a range of different approaches to offer health insurance-sponsored weight loss. "Said Dr. Kaufman, "Other health plans are coming around to placing greater emphasis on these patients."
- **This year, payers are a big focus at all of these companies thanks to a favorable USPSTF recommendation - see Omada's animated video here for the background.** In addition, last fall, the USPSTF released a new "B" recommendation with expanded screening criteria for type 2 diabetes. Omada CEO Mr. Sean Duffy told us, "The short story is that increasingly, programs based on the landmark Diabetes Prevention Program clinical trial are becoming standard of care."
    - **For DPS Health, the biggest and quickest upside comes from health plans** - these groups can rapidly add hundreds of thousands of members simply by agreeing to offer the program and working with companies that can scale to very large numbers. This is also true for large integrated health systems. In DPS' experience, once a partner has decided the specific target population, the biggest challenge is outreaching, educating, activating and engaging participants so they will raise their hands to enroll in the Virtual Lifestyle Management program.
    - **Omada is focusing on health plans in response to the USPSTF recommendation, but also works with employers, providers and consumers** - the interests and interactions between all four key health care stakeholders need to be considered to deploy these programs rapidly and scalably. One of the biggest challenges is ensuring these efforts fit together. Certainly, the group's background at IDEO places a large focus on the customer experience and design, which often goes unnoticed in healthcare.
- **Though many question whether engagement is lower online, we're not positive this would be the case:** (i) the hassles of face-to-face meeting are removed online, allowing for better attendance and much higher convenience; (ii) Omada and Noom both have participants interact in support groups, which brings accountability to real people; (iii) the anonymity of online delivery may encourage individuals to take part in the program that would otherwise shy away from an in-person interaction; and (iv) some studies have shown that there are no significant differences in weight loss outcomes in behavioral obesity treatment delivered in-person vs. via the Internet.
- **For now, the three programs have "pending" recognition status,** meaning they have agreed to use an evidence-based curriculum that meets the requirements described in the CDC's Standards for Recognition. After two years, they could receive full recognition, which entails demonstrating effectiveness as outlined in the Standards for Recognition performance criteria (e.g., attendance, documentation, outcomes).

Close Concerns Questions

Q: Can programs like Omada, Noom, and DPS scale enough to handle 87 million Americans with prediabetes? What is the gating factor to achieving greater scale?

Q: Where is driving awareness most critical - patients, providers, or payers?

Q: Will US payers widely reimburse for such programs, given that the benefits of diabetes prevention often don't accrue until years down the road?

-- by Adam Brown, Melissa An, and Kelly Close