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The Growing Phenomenon of "Virtual-First" Primary Care

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In October 2021, UnitedHealth Group announced the launch of a lower-premium "virtual-first primary care" plan in which enrollees receive longitudinal care from a telehealth-only physician for most of their primary care needs.[1] This announcement closely followed similar virtual-first initiatives introduced by Humana, Aetna, and many regional plans in the last year. Doctor on Demand, a telehealth company supporting many of these plans, has raised $75 million in venture financing and announced that they are recruiting 1000 more clinicians to support virtual primary care services.[2] Firefly Health, which provides virtual-first primary care services, has announced that it will be offering its own health plan.

The apparent growing phenomenon of virtual-first primary care follows the surge in telehealth use during the pandemic and the increasing comfort with telehealth among many patients and physicians. Virtual-first takes the next step, whereby telehealth becomes the starting place for most primary care.

Model Variation and Potential Benefits

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Conceptually, virtual-first means that patients will use telehealth as the first option for primary care services; however, what this means specifically for patients and clinicians varies across the different models.

One variation of virtual-first primary care, exemplified by one of MDLive's offerings, involves a virtual primary care physician (PCP) or other primary health care professional to provide care that supplements a patient's in-person PCP.[3] In this model, enrollees are encouraged to contact their virtual PCP for any medical issues, and the expectation is that this will be an ongoing, longitudinal relationship. Virtual PCPs can adjust medications for chronic illnesses and help triage patients according to reported symptoms or clinical concerns. Members of these plans are still encouraged to also see their in-person PCP, in particular if a nonemergency clinical concern arises that requires an in-person examination or treatment (laceration, vaginal discharge, etc).

Another model, exemplified by Firefly Health, involves a virtual PCP who serves as a patient's primary clinician for all nonemergency medical questions; the virtual PCP replaces the in-person PCP.[4] These models invest significantly in technology infrastructure to make it easy for patients to communicate with their virtual care team, which also often includes behavioral health and clinical specialists, as well as to coordinate in-person examinations and testing as needed with clinical partners, such as urgent care centers. This approach may result in numerous care interactions for each patient per month, many of which may be text messages. According to a report involving approximately 7000 patients from Firefly Health, patients reported on average 41 interactions per year.[5] If in-person testing (such as electrocardiography) or a physical examination is needed, patients are referred to an in-person clinical partner such as a local laboratory or urgent care center.

The shift to virtual-first models is motivated by the fact that for some patients, access to in-person PCP visits may be limited, and many patients with chronic illness have poorly controlled disease. The hope is that more accessible care will drive more frequent care contact that could in turn lead to better chronic disease management and prevention of acute exacerbations of chronic disease. There is also an assumption that having an easily accessible PCP could help patients avoid costly emergency department visits for low-acuity conditions that could be managed via telehealth. A virtual PCP might also be better suited to refer patients to specialty physicians who have higher quality or lower costs. Together, the hope is that these approaches could reduce health care spending while maintaining quality of care. Some virtual-first plans are being offered at costs that are 8% to 20% lower than similar product offerings.[6] For example, Harvard Pilgrim's pricing for its "SimplyVirtual" virtual-first plan is priced 8% below a traditional health maintenance organization product.[6]

Potential Concerns and Pitfalls

Despite these possible advantages, virtual-first plans have a number of unknowns and potential pitfalls. First, although many health care issues could potentially be addressed via telehealth, these offerings raise the fundamental

question of what portion of primary care can be provided safely without an in-person physical interaction and a physical examination. For example, how critical is a lung examination to determine if shortness of breath may be due to asthma as opposed to pneumonia? When a lung examination or testing, such as a chest radiograph, is currently needed, virtual-first offerings typically refer patients for visits with in-person clinicians, which introduces the possibility of delays in care and difficulty traveling to clinicians. However, new tools such as virtual stethoscopes or mobile radiography services provided in a patient's home are becoming available and may soon be able to obviate this need.[7] Ultimately, determining when it is safe for a patient to have solely in-home remote evaluation vs a combination of telehealth and in-person services will require careful monitoring.

Second, how will virtual-first models coexist with existing PCPs, especially when virtual PCPs serve in a supplementary function? Who decides on the appropriate medications, and what if the 2 clinicians differ in their recommendations? To what degree is a full view of clinical information available to all clinicians, and what if the existing PCP does not even know that a virtual PCP is helping to manage care? These concerns all relate to the potential for inadequate coordination between a patient's virtual and in-person PCPs that could put the patient at harm. While challenges with care coordination have long existed between PCPs and urgent care centers, the coordination challenges between existing PCPs and virtual PCPs are likely to be greater given that both are expected to have a longitudinal relationship and address many of the same clinical issues.

Models that intend to fully replace an in-person PCP with a virtual PCP have their own coordination challenges when the virtual PCP refers a patient to an in-person urgent care or specialists. It will also be important to assess the quality of the patient-physician relationship in this fully virtual model relative to traditional primary care and how any differences translate to health outcomes. Also, it is uncertain whether patients will be able to keep their virtual PCP if they lose or have to change insurance because of a job change or other factors.

The advantages of virtual-first primary care are largely theoretical. Robust evaluation is needed to determine whether these models deliver on their promise of improved chronic illness management, reduction of avoidable emergency department visits, and better referrals. Just as important is assessing whether patients are satisfied with their virtual-first physicians. Health plans clearly see a market opportunity and there has been substantial initial interest, but it remains unclear whether momentum will increase with more patients switching to try these models or if these plans will remain niche products.[6] In addition, liability issues related to medical care provided in virtual-first primary care approaches must be carefully considered.

Any evaluation must address the fact that new enrollees likely to embrace a virtual-first product will be younger and more highly educated people who, on average, use the health care system the least. By preferentially enrolling healthier people and therefore having enrollees with lower health care expen-

ditures, the plan can be profitable regardless of whether the plan leads to improved care. An evaluation of a similar type of plan in Switzerland that involved 160 000 patients over 6 years found that much of the decreased spending seen in this plan was due to preferentially enrolling people with lower baseline expenditures.[8] A related issue is how these plans are mitigating issues of health equity. For instance, will health plans provide a subsidy for a smartphone or tablet as well as internet access to individuals and families who are unable to afford these technologies?

Conclusions

Despite the recent activity involving development of some virtual-first plans, it remains unclear whether these new offerings will attract substantial interest among patients or if these plans will ultimately be niche product offerings. Furthermore, even though the virtual-first model has many potential advantages, many critical issues remain unknown, and rigorous evaluation is needed to understand the clinical benefits and risks and whether this model can deliver on the promise of maintaining health care quality and decreasing health care spending.

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