An interprofessional student-faculty collaborative telehealth program to address poorly controlled diabetes and social determinants of health exacerbated by the COVID-19 pandemic

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BACKGROUND AND NEEDS
• The impact of the COVID-19 pandemic on primary care practices has been profound, transforming technologies, workflows, and physician-patient relationships.
• As such, providers have had even less time to care for patients’ chronic conditions. In needs assessment interviews, primary care physicians (PCPs) generally expressed the need for additional time with patients to expand their interactions or face other pandemic-related barriers.
• If these growing pandemic-exacerbated social disparities are not identified and addressed in the setting of chronic disease care, patient outcomes will suffer.

OBJECTIVES
• Adapt an existing student-faculty collaborative practice model to a telehealth platform for diabetes management.
• Assess the impact of the intervention on diabetes outcomes.
• Study the program’s impact on clinical outcomes, SDOH needs, and patient and provider satisfaction.
• Implement our telehealth model to address medical and socioeconomic burdens faced by patients with other chronic conditions.

SETTING AND PARTICIPANTS
• Healthcare Associates (HCA) is the primary care practice at Beth Israel Deaconess Medical Center (BIDMC) is a tertiary care center in Boston, Massachusetts and a teaching hospital of Harvard Medical School (HMS).
• SDOH screening and recruitment calls were made by medical, nurse practitioner, physician assistant, and undergraduate student volunteers.
• 52 patients were enrolled and participated in structured diabetes management visits carried out via telehealth at the student-faculty clinic with care provided by medical and nurse practitioner students supervised by a certified diabetes care educator/nurse practitioner and attending physicians.
• Additional visits with dietitians and their faculty were available to patients.

WORKFLOW

<table>
<thead>
<tr>
<th>Obtained list of patients from population health team with diabetes and HBA1c &gt; 8 and &lt; 11 (n=465)</th>
<th>SDOH screen on patients reachable via telephone</th>
<th>Patient enrolled in program (n=64), patient scheduled for initial visit (n=59)</th>
<th>Patient completed 2+ visits (n=23)</th>
</tr>
</thead>
</table>

Table (left): Baseline characteristics for patients who were screened who did and did not enroll in our study.

<table>
<thead>
<tr>
<th>Did not enroll (n=50)</th>
<th>Enrolled (n=64)</th>
<th>Participants who enrolled and did not enroll in our program</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Race</th>
<th>BMI</th>
<th>HTN</th>
<th>HCL</th>
<th>CVD</th>
<th>SUDs or Endorsed lifestyles</th>
</tr>
</thead>
<tbody>
<tr>
<td>23 White 14 Black 5 Hispanic</td>
<td>31.35</td>
<td>81%</td>
<td>79%</td>
<td>79%</td>
<td>83%</td>
</tr>
<tr>
<td>10 White 11 Black 1 Hispanic</td>
<td>31.25</td>
<td>78%</td>
<td>79%</td>
<td>79%</td>
<td>19% 19%</td>
</tr>
</tbody>
</table>

Baseline characteristics did not differ significantly between patients who enrolled and did not enroll in our program.

Next steps
• Integrate SDOH screening into a telehealth diabetes program as a feasible and efficient way to assist patients with uncontrolled diabetes with both medical and social needs.
• Despite reporting high levels of motivation and confidence in managing their diabetes, many patients reported needing help with and were not up to date with diabetes management.
• Patients reported difficulty maintaining a healthy diet, affording healthy food and medications, and exercising.
• Our data highlight how SDOH may modulate patients’ ability to manage diabetes in a practical setting.

ACKNOWLEDGMENTS
• The authors would like to thank the Beth Israel Deaconess Medical Center’s Center for Healthcare Delivery which provided funding for the completion of this work.