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## Background

Prior to the COVID-19 pandemic, Certified Diabetes Educators (CDEs) used phone rarely in order to communicate with their clients. Since Covid-19 pandemic, virtual care for diabetes management has increased with phone being the most accessible method for clients (Topol, 2020). The virtual visits resolves the accessibility and transportation issues. Physical access and securing transportation to receive care have been identified as barriers to make diabetes manager more difficult (Strauss et al., 2006; Zgibor et al., 2011). However, it is difficult for healthcare providers to assess their clients during virtual phone visits due to a lack of visual cues, which can result in the loss of important information (Glaser, 2020). Additionally, diabetes management becomes challenging without individualized care and education provided by healthcare providers (Brämberg et al., 2012; Saunders, 2019). Providing client-centered care requires understanding of every client's unique healthcare needs and adapting educational information to meet with their health literacy level (American College of Obstetricians and Gynecologists, 2016).



Figure 1. Virtual Visit for Diabetes Management

## Purpose

The goal of this research study was to have a health literacy tool that would help healthcare providers to better understand their client. The study had multiple phases and this poster will highlight the phase one and phase two of the study (Figure 2).

Figure 2. Summary of Research Development Process



## Method

After extensive search for the existing health literacy tools available six diabetes health literacy tools were identified. Then, the three most appropriate health literacy tools were selected (underlined in Figure 3) and were assess by CDEs during a focus group. The tools were selected based on the tool:

- Covered diabetes knowledge by assessing understanding of clients' knowledge regarding diagnostic testing and hypoglycemia treatment
- Included information regarding blood glucose monitoring, understanding carbohydrates, and the impact of physical activity and medications on diabetes
- Were appropriate for use over the phone and did not contain pictures or require clients to look at the images

A thematic analysis was performed to analyze their view on the tools and if there is a need to develop a new diabetes health literacy tool.

Figure 3. Summary of the Health Literacy Tools

Number	Tool Name
1	The Health Literacy Scale and Subjective Numeracy Scale (HLS/SNS)
2	The Diabetes Knowledge Test (DKT)
3	<u>Diabetes Numeracy Test (DNT)</u>
4	A Shortened Version of the Diabetes Numeracy Test
5	Literacy Assessment for Diabetes (LAD)
6	Nutrition Literacy Assessment Instrument

## Result

This research study was conducted to assess if any of the existing diabetes health literacy tools if they were suitable for healthcare providers to use in practice setting. Currently there are multiple diabetes health literacy tools available but in the focus group with healthcare providers who were certified diabetes educators, it was noted that the existing health literacy tools were not suitable for practice setting as there were:

- Too long
- Too vague
- Too complex

## Conclusion

The CDE participants in the study indicated there is a need for a new diabetes health literacy tool that can be used in practice setting.

## References

- American College of Obstetricians and Gynecologists (ACOG). (2016). Health literacy to promote quality of care. Committee Opinion No. 676. *Obstet Gynecol*, 128(4), e183-e186. doi: 10.1097/AOG.0000000000001714
- Brämberg, E. B., Dahlborg-Lyckhage, E., & Määttä, S. (2012). Lack of individualized perspective: A qualitative study of diabetes care for immigrants in Sweden. *Nursing & Health Sciences*, 14(2), 244-249. <https://doi.org/10.1111/j.1442-2018.2012.00684.x>
- Glaser, W. (2020). Virtual care is here to stay, but major challenges remain. *Canadian Medical Association Journal*, 192(30), E868-E869
- Saunders, T. (2019). Type 2 diabetes self-management barriers in older adults: An integrative review of the qualitative literature. *Journal of Gerontological Nursing*, 3, 43. doi:10.3928/00989134-20190211-05
- Strauss, K., MacLean, C., Troy, A., & Litterberg, B. (2006). Driving distance as a barrier to glycemic control in diabetes. *Journal of General Internal Medicine*, 21(4), 378. <https://doi.org/10.1111/j.1525-1497.2006.00386.x>
- Topol, E. (2020, March 31). *Telemedicine is essential amid the covid-19 crisis and after it*. The economist. <https://www.economist.com/open-future/2020/03/31/telemedicine-is-essential-amid-the-covid-19-crisis-and-after-it>
- Zgibor, J. C., Gieraltowski, L. B., Talbott, E. O., Fabio, A., Sharma, R. K., & Karimi, H. (2011). The association between driving distance and glycemic control in rural areas. *Journal of Diabetes Science and Technology*, 5(3), 494 - 500. doi:10.1177/193229681100500304