COVID-19 and Diabetes | An Appropriate Response

KEY MESSAGES
● People with diabetes are at increased risk of contracting COVID-19
● COVID-19 mortality is approximately 9X higher in people with diabetes
● Lack of access to physical healthcare services will compound management problems for people with diabetes
● Coherent patient communication and support can help and should be complemented with a focused telemedicine intervention

INTRODUCTION
South Africa is in the early stages of responding to the COVID-19 pandemic. Good proactive measures have been taken by a variety of stakeholders to restrict the spread of COVID-19 in South Africa. It is highly likely that South Africa will see a significant increase in confirmed cases over the next 2 to 6 months. A material portion of the diagnosed cases will be insured risks. Life and health insurers should therefore take immediate proactive measures to help clients with diabetes to minimize the chance of contracting COVID-19 and to respond in the best possible way to confirmed diagnoses. We believe that unique measures should be taken in respect of insured clients with diabetes specifically and that taking a generic approach would be a substantial missed opportunity to help insured clients and mitigate insured claims related to COVID-19.

Guidepost’s purpose is to ensure a healthier, happier life for more people with diabetes. We are therefore concerned about the wellbeing of the diabetes population in the context of COVID-19 and it is our strong desire to assist as many people with diabetes as possible (and the life and health insurers who serve them) to respond appropriately to the pandemic.

We believe that there are a variety of specific measures that life and health insurers should take immediately in order to help insured clients with diabetes. The purpose of this document is to outline the key elements of these measures and to provide a brief explanation why we hold this view.

We are also working with urgency to add specific COVID-19 modules into our Diabetes Management Programme (DMP) in order to help existing and future users of the Guidepost DMP to reduce the risk of contracting COVID-19 and mitigate the effects of the disease as well as manage the consequences of
related behaviour changes such as social distancing. This will further strengthen the material improvement in HbA$_{1c}$ (and related comorbidities) that the Guidepost DMP can create within a 2-6 month period.

Guidepost has a long track record as one of the leading **diabetes telemedicine** providers in the world. Guidepost and their team of coaches and allied professionals under the guidance of Professor David Segal have the experience and the skill set to deliver **scalable high-quality monitoring and risk-management services** into this vulnerable population. To discuss how Guidepost could support your response to the COVID-19 pandemic, contact us via admin@guidepost.net.

**STRONGER PREVENTATIVE AND RISK MITIGATION MEASURES ARE REQUIRED FOR INSURED CLIENTS WITH DIABETES**

People with diabetes are at increased risk of contracting the SARS-CoV-2 virus that causes COVID-19. Those that do contract it are more likely to die. For those in quarantine, self-management behaviours can deteriorate and social isolation can lead to anxiety and depression; these factors can contribute to increased risk of acute complications and hospitalisations. Stronger preventative and risk mitigation measures are required.

- **Increased risk of contracting COVID-19**

  People with diabetes, especially poorly controlled diabetes, are at an increased risk of contracting COVID-19 as they are immunocompromised (Wang, et al. 2020). The prevalence of diabetes among people with COVID-19 ranges from 5-20% (Wang, et al. 2020).

  Poor blood glucose control weakens the immune system, increases susceptibility to COVID-19 infection and leads to more severe disease when infections do occur. Thus, among other measures, efforts to improve glycaemic control are an essential preventative measure to reduce the risk of contracting this disease.

- **More severe consequences once COVID-19 is contracted**

  Data from China indicates that the risk of admission to ICU for COVID-19 was nearly 4 times higher for insured clients with diabetes who contract COVID-19 compared to the general population (Wang et al. 2019). Importantly, **mortality is approximately 9 times higher in people with diabetes** than those without comorbidities (Wang, et al. 2020). In our view, it is clear that insured clients with diabetes require immediate and unique support delivered in a way that does not expose them to other infected persons.

- **Existing approaches to managing people with diabetes are inadequate**

  Typically the solution to improve glycaemic control would be to identify insured clients with poorly controlled diabetes and refer them to their treating doctor. However, due to the infectious nature of the condition this may in fact be more harmful as it exposes people with diabetes to potentially infected persons. Due to continuous therapy adjustment required for people with diabetes, a single consultation with their doctor is unlikely to improve glycaemic control. Thus, in order to improve glycaemic control
insured clients will need to be exposed to risk at a doctor's rooms several times. This problem is further exacerbated if the doctor decides to admit the insured client for “high blood glucose levels”.

During periods of acute infections, diabetes sick day management becomes a vital aspect of care. If not handled correctly there is an increased risk of poor medication compliance, hypoglycaemia, hyperglycaemia, poorly controlled hypertension, dehydration, acute renal injury and overall mortality (Diabetes Canada, 2018). As mentioned, hyperglycaemia is a particular concern as it impairs immunity, the only effective means of combating the infection.

- **Risk of worsened diabetes control due to isolation**

  During periods of quarantine, people with diabetes are less likely to receive social support, more likely to reduce their physical activity and will have increased exposure to food (e.g. boredom eating at home). Insured clients with diabetes will therefore manage their condition differently given the changes created by isolation. Furthermore, insured clients with diabetes are aware of the increased risk that they are exposed to from COVID-19 infection which adds to their anxiety and sometimes depression. This may result in acute deterioration in blood glucose control which could precipitate a hospital admission at a time when healthcare services are already overburdened and increase the risk of exposure to other infected insured clients.

**WHAT SHOULD LIFE AND HEALTH INSURERS DO?**

In our opinion, life and health insurers are uniquely positioned to take immediate and decisive positive actions in respect of their clients with diabetes. This approach could be applied to all impaired risks who may require similar support.

1. Create a specific **communications and support strategy for insured clients with diabetes** to include the following:
   - Sharing information to explain why persons with diabetes are at even higher risk and need to take immediate and specific additional measures as prevention and risk mitigation;
   - Firm **recommendations** to immediately implement the following preventative and risk mitigation measures:
     - immediately self-isolate for at least 2 months (potentially for an extended period of time), to avoid getting infected;
     - avoid visiting doctors rooms, pharmacies, hospitals as far as possible;
     - proactively reach out to your insurer for help and support via telephone if your health deteriorates or if you have any questions or concerns;
   - Offering support via a **dedicated diabetes support line** (telephone, email, whatsapp, social media) to answer specific diabetes related questions and to provide emotional and psychological support;
   - Offering **sick-day management** services via the diabetes support line to help insured clients know what actions to take and when in the event of a deterioration of their health;
Sharing and continuously updating a frequently asked questions document for insured clients with diabetes specifically;

2. Various recent global clinical guidelines advocate for proactive steps to mitigate the increased COVID-19-related risk for insured clients with diabetes (American Diabetes Association 2020, Diabetes UK, 2020). These steps include delivering a telephonic diabetes coaching and support service that:

- Adequately assess the insured client's underlying risk of acquiring the infection through a thorough biopsychosocial risk assessment.
- Assess their morbidity and mortality risk by developing a thorough understanding of their diabetes status together with the incremental risks contributed by their co-morbid conditions.
- Connect the insured client with a caring and competent coach who can calm them down and walk the difficult journey with them and their family.
- Enable frequent telephonic contact allows the insured client to acquire the knowledge and skills required to improve their blood glucose control and facilitate coping with the demands of the pandemic.
- Teach the insured client the necessary self-management skills that are needed to avoid unnecessary hospitalization.
- Offer a 24-hour emergency hotline service to manage selected diabetes-related emergencies at home rather than risking a hospital admission.
- Keep the insured clients treating doctor fully informed at all times.
- Actively support diabetes care in clients who do get infected to prevent a catastrophic deterioration in blood glucose control, and potential progression to severe disease.
- Triage the insured client to appropriate care should their condition deteriorate during home management.

While we realise that immediate action may feel unnecessary or might be viewed as overreaction, we cannot overemphasise the urgent need to immediately take proactive steps to help insured clients with diabetes. The consequences of inaction will be severe and there is no time to hesitate or conduct traditional cost benefit analyses. We must act now.

**HOW CAN GUIDEPOST ASSIST?**

Due to the COVID-19 pandemic all non-emergency visits to doctors' practices are being curtailed. The American Diabetes Association and other global diabetes groups have recommended teleconsultations (American Diabetes Association 2020, Diabetes UK, 2020). Very few doctors' practices have the capacity (time, resources, or know-how) to do telephonic diabetes consults with their insured clients and even fewer have the ability to do meaningful data-driven consults of a duration and quality that is likely to improve glycaemic control. To get doctors set up to provide these services will take time and significant resources, both which are lacking during this difficult period.
Guidepost has a long track record as one of the leading diabetes telemedicine services in the world. Guidepost and their team of coaches and allied professionals under the guidance of Professor David Segal have the experience and the skill set to deliver scalable high-quality diabetes services into this vulnerable population. To discuss how Guidepost could support your response to the COVID-19 pandemic, contact Rohan Coetzer at rohan.coetzer@guidepost.co.za or 0835040700.

REFERENCES


