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The Secretary
Expert Committee on the Selection and Use of Essential Medicines
Medicines Selection, IP and Affordability (MIA)
Department of Health Products Policy and Standards (HPS)
20 Avenue Appia
1211 Geneva 27

31 March 2023

Dear Members of the Expert Committee,

Re: Application to add pen devices and cartridges of human insulin for children and adults with diabetes in the WHO Model List of Essential Medicines

I hereby submit this letter against the inclusion of pen devices and cartridges of human insulin for children and adults with diabetes in the WHO Model List of Essential Medicines (EML and EMLc). This current application in my view fails to: present convincing evidence of the benefit of human insulin in pen devices and cartridges; properly discuss cost implications; and understand the market and global health implications of such a decision.

With regards to the evidence the authors of this application state that they carried out a review of the literature and evidence. They fail to present how they carried out their search. The evidence presented is based on two systematic reviews and two observational studies. Evidence also mixes studies looking at analogue and human insulin in vial and pen formulations. In summary the authors of this application highlight that insulin pens offer better accuracy and higher acceptance by people with diabetes resulting in less hypoglycemia. They add other advantages such as reduced education for injection techniques and less stigma. However, there is a lack of transparency and comprehensive presentation of the existing evidence to enable their application to defend adding pen devices and cartridges of human insulin to the WHO Model EML and EMLc.

Data on costs use two retrospective analyses of databases. These studies show cost savings due to reduced hypoglycemia. This data is from high-income countries and the authors fail to present data from different studies, such as Ewen et al. (2019) which shows that pens were higher priced in 13 low- and middle-income countries in a way to highlight that high prices should be considered. Price is an important consideration to consider affordability for health

systems and individuals especially when costs are mainly paid out of pocket. A medicine could be seen as cost-effective, but still not be affordable to individuals on low wages.

In my view one of the biggest failings of this application is its lack of contextualization within the ongoing work that the WHO is doing for example, with the Global Diabetes Compact and Prequalification. These global initiatives have engaged the private sector with regards to specific products. From the private sector perspective vials versus pens need to be considered as different products, with regulatory, cost of production and pricing elements. In addition, in the last iteration of the revision of the WHO Model EML and EMLc long-acting analogue insulins were added. To date there is no data on the impact of this decision with regards to availability and affordability for people with diabetes and health systems. In 2019 the Expert Committee had the foresight to provide WHO with clear recommendations with regards to improving access to insulin. These included:

- Establishment of a WHO technical working group on insulin
- Consultation with Member States and other stakeholders to identify/clarify barriers to access at country level
- Strategies to address current regulatory barriers for biosimilar insulins, including the expansion of the WHO Prequalification Programme
- Development of a comprehensive approach to address insulin prices, including new mechanisms for pooled procurement through UN supply agencies (e.g. UNICEF and UNDP)and through providing support for countries
- Identification of evidence and research gaps regarding insulin use and supply, including setting-specific differences in clinical practice and health systems

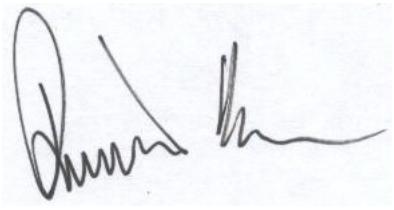
Although many of these activities have been started at WHO and by other partners, these need to be further advanced in order to lay the foundations to truly improve access to insulin, be it human, analogue, in vials or pens. Beyond this I feel two other factors are important to consider. Firstly, recent data Van de Wiele et al. (2022) shows that patents on pen devices has increased over the past years in contrast to a decrease in patents on the actual insulin. This information is important to consider both as a factor that will possibly hamper access as well as with regards to the second issue of how insulin is purchased in low- and middle-income countries. Many countries purchase insulin through tenders and thus each year may have different types of pens arriving to be used by people in their countries. If durable pens are bought, then these only work with their respective brand cartridges. This can have a significant impact on price to the individual or system as well as the need to ensure that constant support and education is delivered to ensure smooth shifts between different products.

Clearly the needs of people with diabetes need to be considered. I would argue that anecdotal evidence would suggest a preference for pen devices for a variety of reasons. These views need to be considered, but also better documented in making a decision with such global health ramifications. In my view the most important question should be whether or not adding pen devices and cartridges of human insulin will impact access to insulin and outcomes for people with diabetes. The answer is unfortunately no, given that human insulin still fails to reach those in need, due to various global and national factors. With the launch of the Global Diabetes Compact in April 2021 the WHO is finally addressing some of the action points

included in the recommendations from the 2019 Expert Committee which will hopefully tackle the different factors needed to guarantee access to insulin for all those in need. Until this is done adding pen devices and cartridges of human insulin may create more problems than it solves.

In advance I would like to thank the Expert Committee for taking the time to consider my arguments, and remain,

Yours sincerely,



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