



## PURPOSE

Automated insulin delivery systems (AID) use algorithms from continuous glucose monitor input to adjust insulin administration. However, this complicates the management of ketones during pump failure as these algorithms cannot account for on board subcutaneous insulin which is standard practice for ketone management in pump failure.

## AIM STATEMENT

This project aimed to increase knowledge and recall by 10% with of a new AID ketone action plan in a pediatric diabetes clinic from December 2023 to April 2024

## METHODS

A 5 question post-teaching survey for families to complete. This survey was provided to 12 families at baseline and 13 families after the implementation of the updated ketone action plan. Multiple Plan-Do-Study-Act (PDSA) cycles were performed and included: creation of ketone action plan, creation of visual representation of ketone action plan, in-person education sessions, and follow up questionnaires.

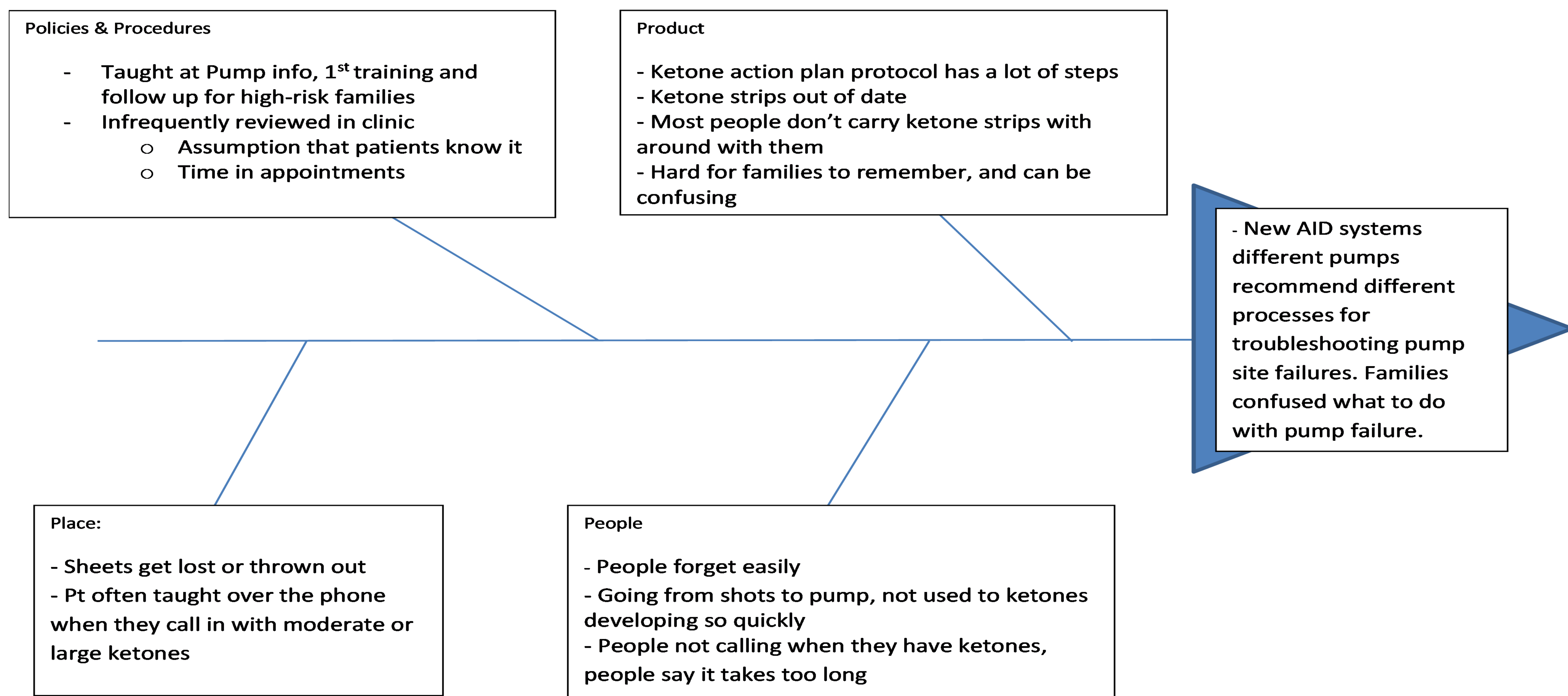
## RESULTS

Out of the 12 families evaluated at baseline, six responded to the survey with an average score of 47% for correct answers. After education using the updated Ketone Action Plan, 13 families were evaluated, and five of them responded, with an improved average score of 56% correct answers. The magnet contributed to better responses for 3 out of the 5 questions.

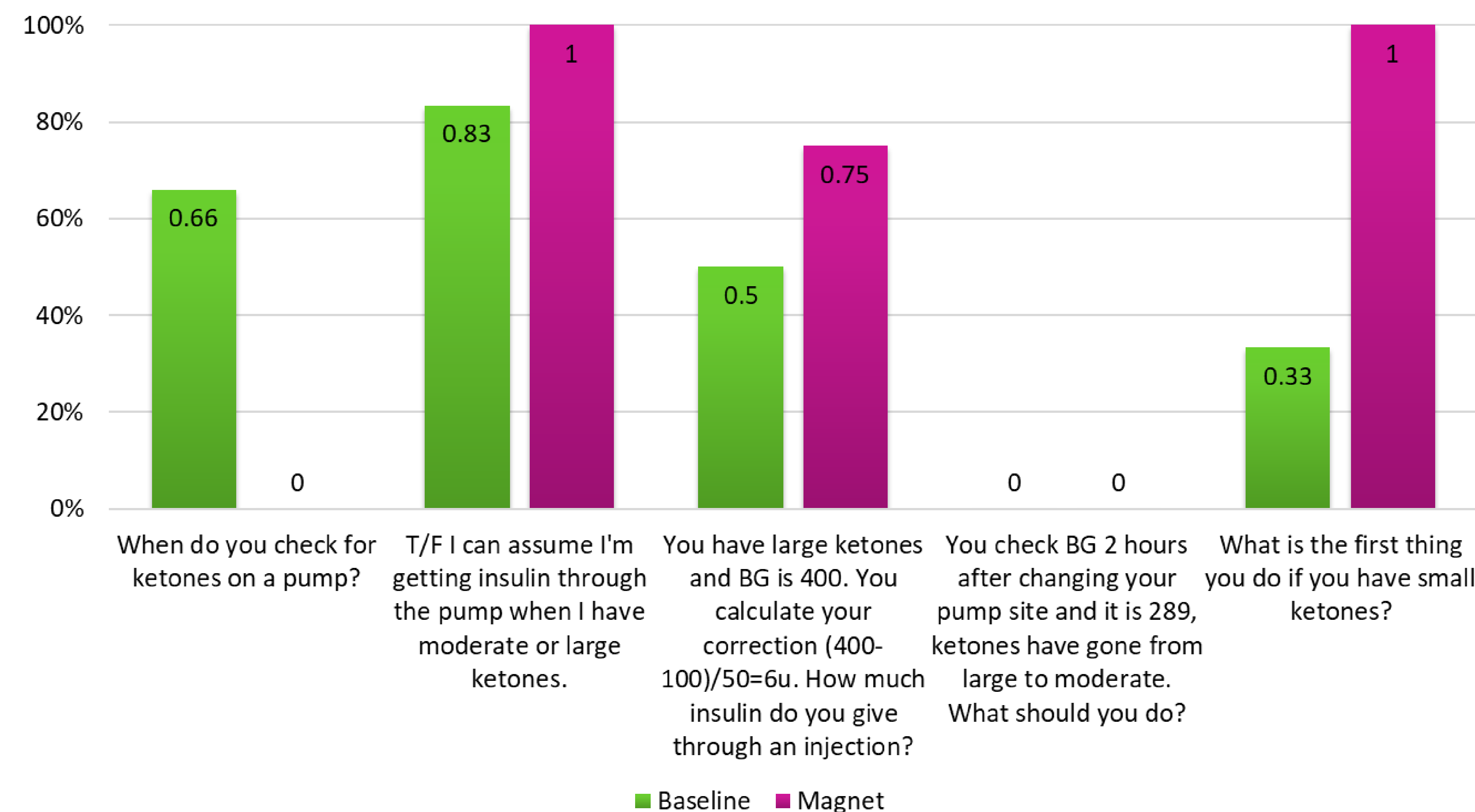
## CONCLUSION

Ketone management on pump therapy can be burdensome. The use of ketone action plan is effective and feasible to improve knowledge and recall. The team will include the visual representation of the ketone action plan in a mobile app through CHOA.

## FISHBONE



### Results for Questions (Correct/Total)



## Ketone Action Plan Magnet

