# Which DIYAPS systems and are people using in the United Kingdom? Insights from the Association of British Clinical Diabetologist's (ABCD) DIYAPS audit programme

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#### Introduction

DIYAPS is an unlicensed automated insulin delivery system developed by people with diabetes **#WeAreNotWaiting**. At the time of writing, three systems were commonly encountered, utilising different combinations of insulin pump and sensor.

In the UK, the system which individuals use is often dictated by local access to different insulin pumps and sensors.

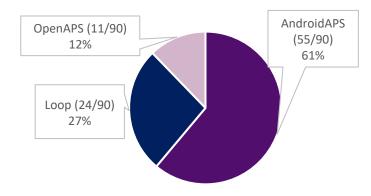
We report the frequency of use of each system, pump and sensors in our cohort including the funding and warranty status.

## Methods

Data from the ABCD DIYAPS audit tool are presented using simple descriptive statistics for the frequency of use of each DIYAPS system, pump and sensor and warranty and funding status where applicable. Analyses were performed in Stata 16.

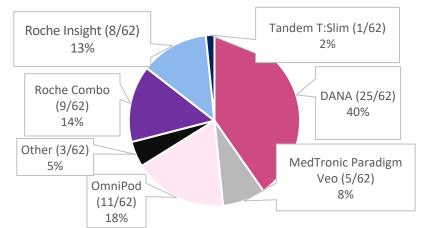
### Results

Provisional results from 101 users are reported. 55.5% were men, 90.3% were white British and median diabetes duration was 25.5 years (IQR 17-33.5). Mean HbA1c was 58.1±11.9mmol/mol and age 41.4±8.9years.

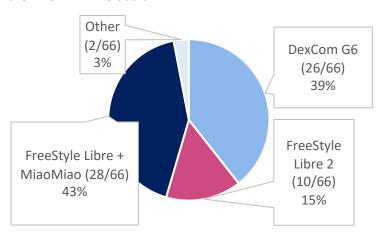


**Figure 1. (above)** Frequency of use of each DIYAPS system in the ABCD audit

**Figure 2. (below)** Frequency of use of each insulin pump in the ABCD DIYAPS audit



**Figure 3. (below) F**requency of use of each glucose sensor in the ABCD DIY APS gudit



### Results (cont)

NHS funded pumps were used by 53/61 (81%). Only 11/60 (18%) of pumps were out-of-warranty. The majority of sensors were NHS funded (34/58, 59%). The frequency of DIY APS system, insulin pump device and glucose sensor are shown in Figures 1, 2 and 3 respectively.

### Conclusion

AndroidAPS is the most commonly used DIYAPS in our cohort. Users often continue to access NHS-funding for equipment. A significant proportion use out-of-warranty devices and off-label adaptations to convert flash to rtCGM. Ongoing surveillance will be needed and further audit reports will focus on safety outcomes.

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