

# Do patients with NAFLD engage with additional weight management support between appointments?

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## Background and Aim

Background: With the exponential increase in non-alcoholic fatty liver disease (NAFLD) in children and young people (CYP) the numbers attending tertiary centres continues to rise. There is strong evidence that 5-10% weight loss improves/reverses NAFLD. From a liver surveillance perspective, appointments with bloods and imaging every 6–12 months are deemed sufficient, but are not in any way adequate to support diet and lifestyle changes.

Aim: To determine whether CYP, parents or carers engaged with input between appointments by phone/email, and whether body mass index (BMI) improved.

## Subjects and Methods

### Subjects:

- All CYP diagnosed with NAFLD who attended clinic (January - August 2018)
- NAFLD diagnosis by paediatric hepatologist with biopsy or combination of radiological and biochemical data on exclusion of all other known causes of liver disease.
- Exclusion: attending another dietetic service regularly, achieving sufficient weight loss, or weight management not the primary reason for review.

### Method:

- Invited in clinic to have additional follow-up and indicated contact preference (telephone/email)
- Contacted within six weeks of clinic attendance with ongoing contact as desired by CYP, parent or carer.
- Invitation by letter in event of non-response to phone.

### Data collection:

- Clinical, biochemical and anthropometric data (Body mass index z-scores) on attendance.

## Results

There were 33 CYP (11F) invited to have additional follow up with a mean (SD) age at initial appointment of 15 (2.2) years. All agreed to have additional follow-up, 17 (52%) by phone and 16 (48%) by email. The initial invitation was sent to the parent/carer in 19 cases (58%) and the CYP directly for 14 (42%). Successful contact was made with 15 (45%): nine (60%) by phone and six (40%) by email. Of the 15 who received additional follow up, five (33%) had a second contact and one (3%) a third contact. Mean (SD) time from initial face to face appointment to follow up face to face appointment was 37.9 (2.41) weeks. For the 24 (73%) CYP who attended clinic for a follow-up appointment in the review period, mean (SD) BMI z-score at initial appointment was 3.19 (0.53) and follow up 3.23 (0.62). There was no difference in BMI z score change between those who had additional follow up versus those who did not (+0.20 versus +0.10).

Figure 1a: Phone calls/letters Figure 1b: Emails

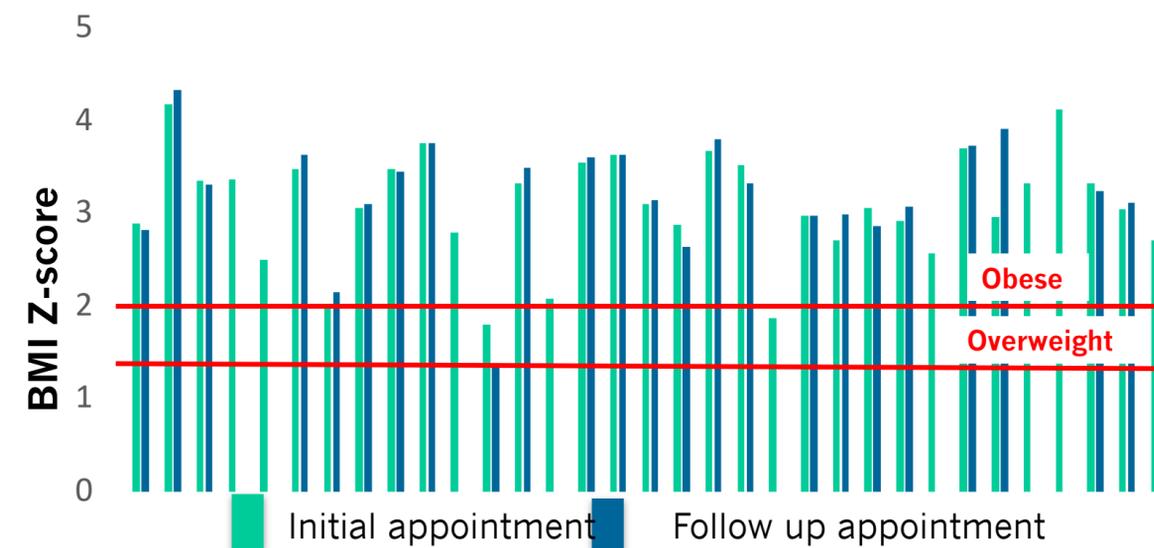
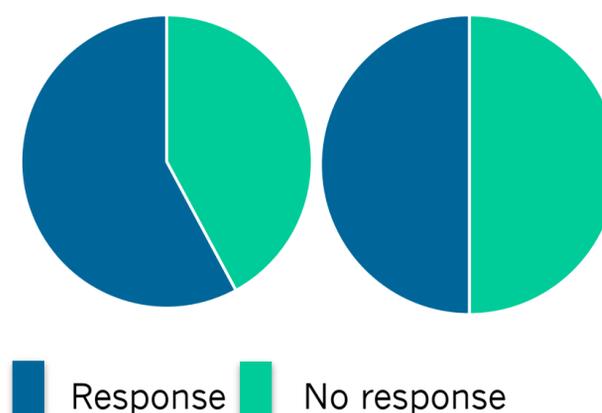


Figure 2: BMI z-score for each patient at initial and follow up appointment

## Summary and Conclusions

- Although all the CYP agreed to have additional follow up, less than half responded to the initial invitation. There was a slight preference for contact via phone rather than email and with parent/carer rather than CYP directly.
- The low response rate is concerning and may indicate a low willingness to engage with weight management support. However, it is also possible that phone messages or emails were not received or that the method of arranging follow-up was responsible for poor uptake.
- Given that the initial response to additional follow up was positive, consideration should be made as to whether a pre-arranged phone clinic would be more suitable.
- Future research could focus on barriers and facilitators to CYP/their families engaging with weight management support and ways to empower CYP to change.
- To pave the way forward a patient questionnaire evaluating the current service and seeking opinions regarding regular, remote follow up would be valuable, particularly in view of the vast increase in remote consultations as a result of the covid-19 pandemic.