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Background

Obesity is a growing trend in Singapore. Obesity has been linked to an increase risk of many health problems such as coronary heart disease, hypertension, stroke, diabetes, metabolic syndrome, osteoarthritis, reproductive problems and many others (NHLBI 2013; WHO 2016).

On average, SGH LIFE Centre receives 30 referrals per week, consisting majority subsidized (SUB) cases; predominantly from intra-department and Polyclinics. The referrals will be faxed in to be reviewed and screened for suitability. Suitable referrals (SUB cases) will be given appointments to see both the clinical coordinator and dietitian on same day as their first visit whereby baseline measurements will be taken, a 12 page extensive questionnaire will be administered and the contributing factors towards their weight will be determined. Lifestyle intervention will be provided on the 1st visit, namely modifying the diet and increasing physical activity. The entire visit will span half a day, inclusive of waiting time, making payment and appointments.

Aim

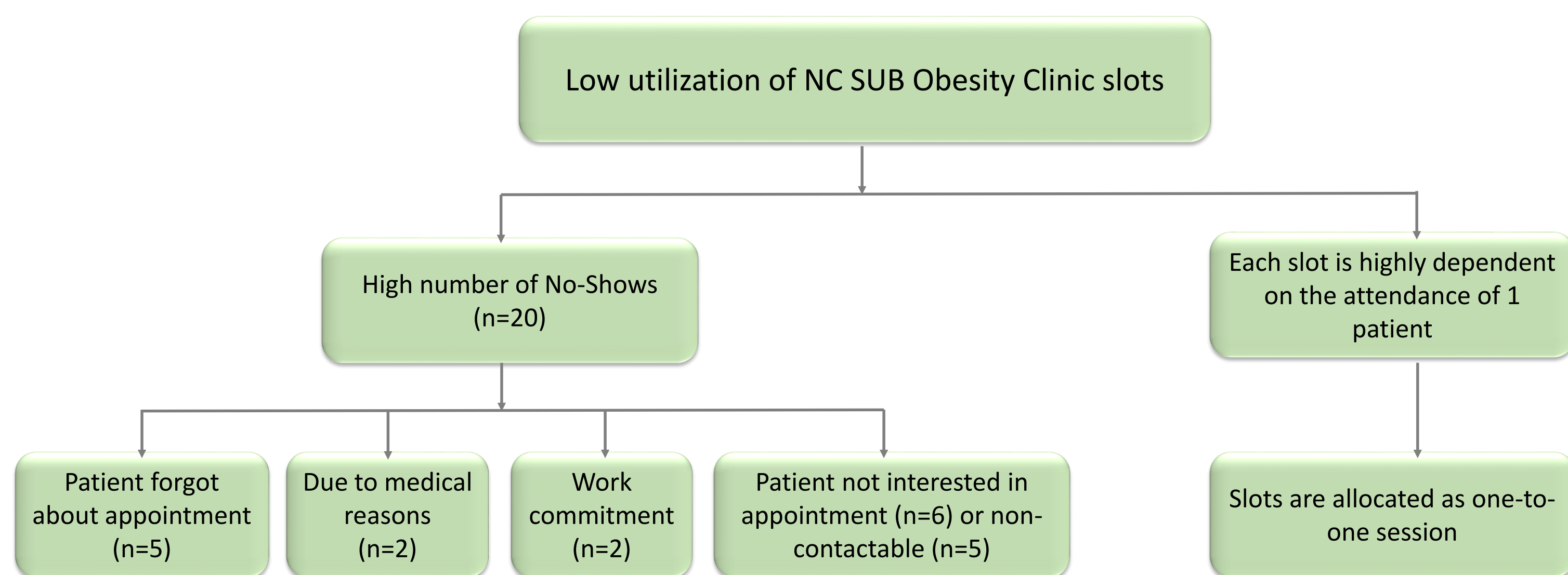
To **increase utilisation** of Obesity Clinic slots for New-Case Subsidized (NC SUB) patients from 40% to 100%, as well as to **reduce the Waiting Time to Appointment (WTA)** for these patients.

Initial State

The maximum number of new cases which can be booked into the clinical coordinator and dietitian SUB slots are 12 each per week. In 2015 (Jan-Sep 2015), the median utilization for new case SUB obesity clinics slots was 40% and No-Show rate was 60%. There was a waste of resources, mainly the NC SUB slots and man-hours used to make appointments and sending out letters and forms. This also resulted in a waiting time of at least 12 weeks to obtain an appointment for the first visit.

Methodology

A telephone survey was conducted on 20 patients in July 2015 to determine the reason for the high No-Show rate (~60%). The results showed that the causes for No-Show were uncontrollable. It also revealed that most patients (~67%) were willing to try group sessions.



- Hence suitable NC SUB patients were booked into a 1-hour group session, which is run by a Clinical Coordinator, Physiotherapist, Dietitian and Psychologist to provide insight on the Obesity Clinic programme, as well as information and tips on making realistic lifestyle changes and enhance motivation.
- After the group session, patients will be arranged for a 1-1 same-day session to see the Clinical Coordinator and Dietitian 2-3 months later.
- Patients who do not turn up for the group session are considered as No-Show and no follow-up appointments are given, hence precious 1-1 slots are not wasted.

Team based: Holistic approach



Results

- 16 group sessions were conducted between 26th Oct 15 to 4th Apr 16, and a total of 90 patients attended. This translated into around 6 patients/session (which is more than the 4 patients/session required for cost breakeven)
- Man-hour cost/patient for the group session is 10 min/patient, as compared to 150 min/patient for 1-1 session, hence **total man-hour saved is 11 hours/week**.

Man-hour cost per patient: before implementation

Clinical Coordinator and Dietitian will allocate 6 hours each per week to see NC SUB obesity patient.

Number of NC SUB patients seen (actual): 40% x 12 patients = 4.8 patients

Man-hour cost per patient: (6 + 6) / 4.8 = 2.5 hours per patient (150 minutes)

Man-hour cost per patient after implementation

The group session involves 4 clinicians running the group who takes 15 minutes each.

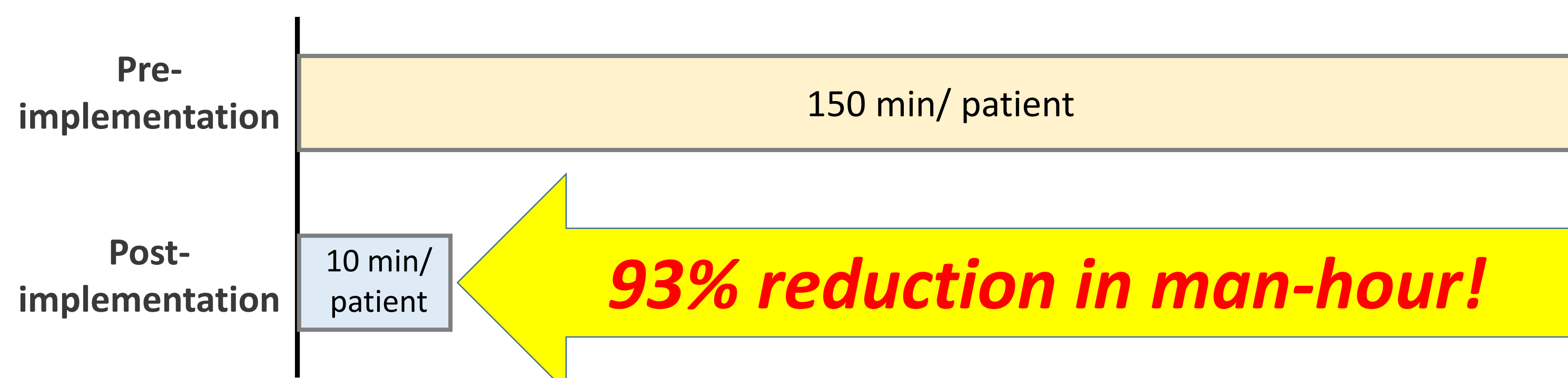
Man-hour cost per patient: (15mins x 4) / 6 = 10 minutes per patient.

Man-hour cost savings: 150mins – 10 mins = 140 minutes saved per patient

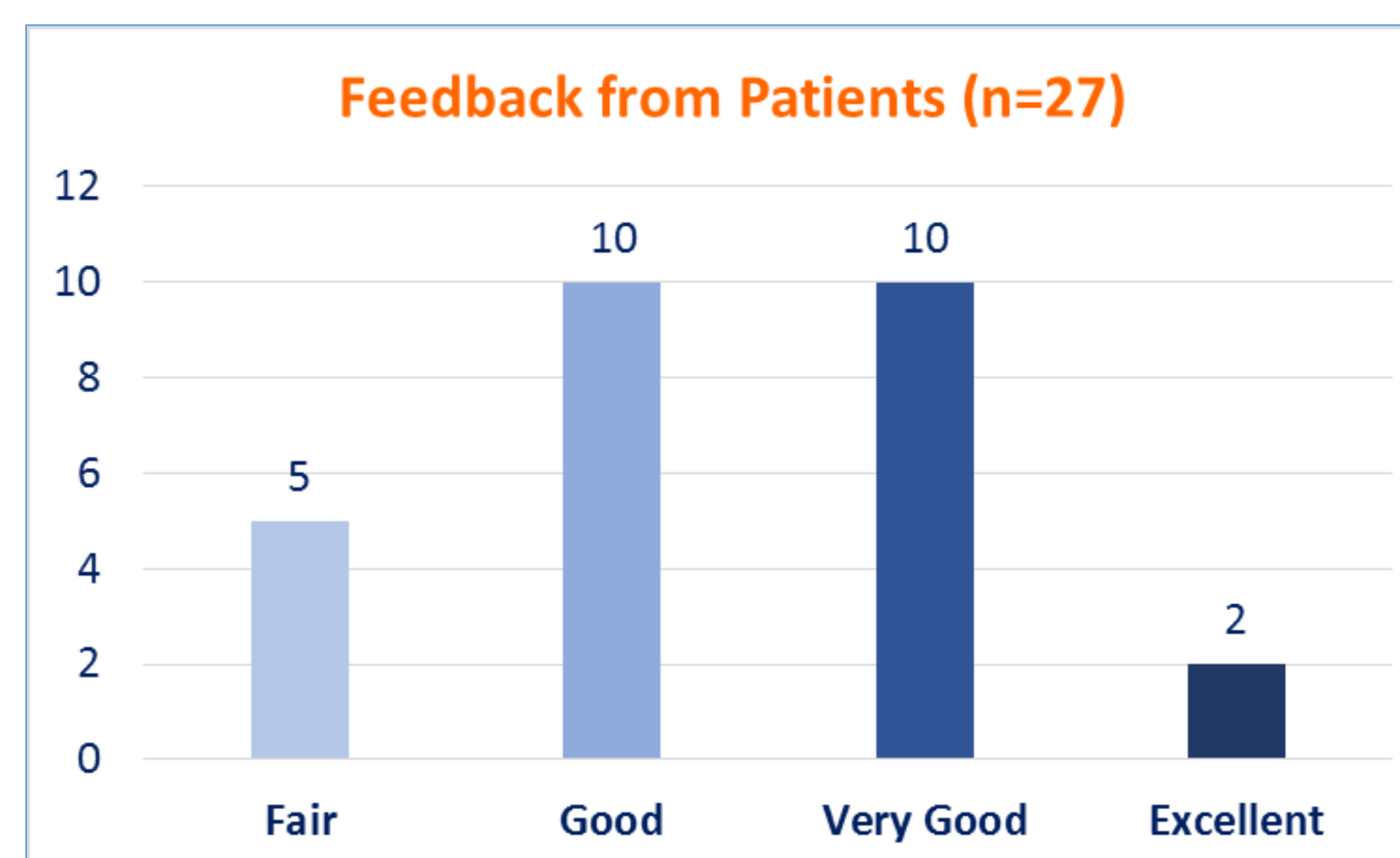
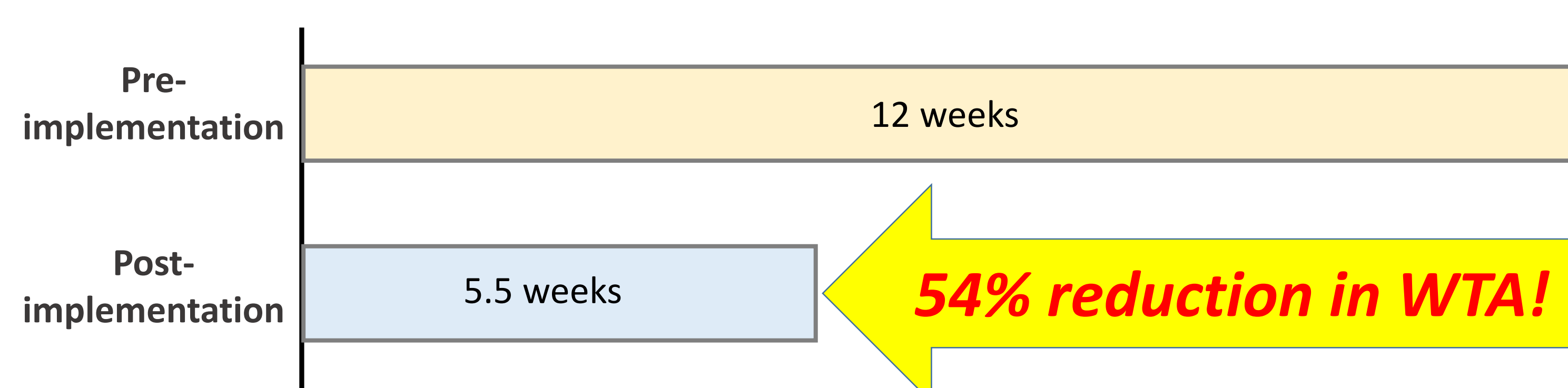
Total Man-hour saved: 12hours – (15mins x 4) = 11 hours per week

- WTA for the Obesity Clinic had also reduced from 12 weeks to between 5 – 6 weeks
- Feedback gathered from the group participants from January 2016 onwards were very positive.

Man-hour cost per patient



Waiting Time to Appointment (WTA)



Conclusion

Waiting time for NC SUB Obesity Clinic has now reduced to 5-6 weeks as compared to 12 weeks previously. No-show rate (Jan - Mar'16) did not increase with the replacement of group session which indicated that this replacement did not deter patients from turning up for their appointment. It also allows the utilization for the clinic slots to improve from 40% to 100% as every session were at least attended by 4 patients.

The man-hours saved is an indication of improved productivity and efficiency. Furthermore, the positive feedback received attests that the group sessions did not compromise quality of service. The inclusion of a multi-disciplinary approach at the 1st session provides holistic approach towards weight management as no one treatment is superior to the other.