Maximising Learning^2, Optimising Resources

SingHealth

Megan Si Huan[1], Ong Ai Ling[1], Lee Fong Sin[1]
SingHealth HQ, [1]Innovation and Quality Management (IQM)

Aim

We aim to increase the number of project teams and learning opportunities for attending each Enhancing Performance Improving Care (EPIC) Quality Improvement (QI) review session.

1   Background

The EPIC QI Workshop is an Innovator level program on the EPIC Learning Pyramid (Fig.1) which provides QI teams with essential knowledge and skills in QI.

EPIC QI Review sessions are part of the post workshop activities. It is a half day session where participants share their project progress and experience. QI Faculty provides guidance and advice on the projects and participants are able to learn from each other.
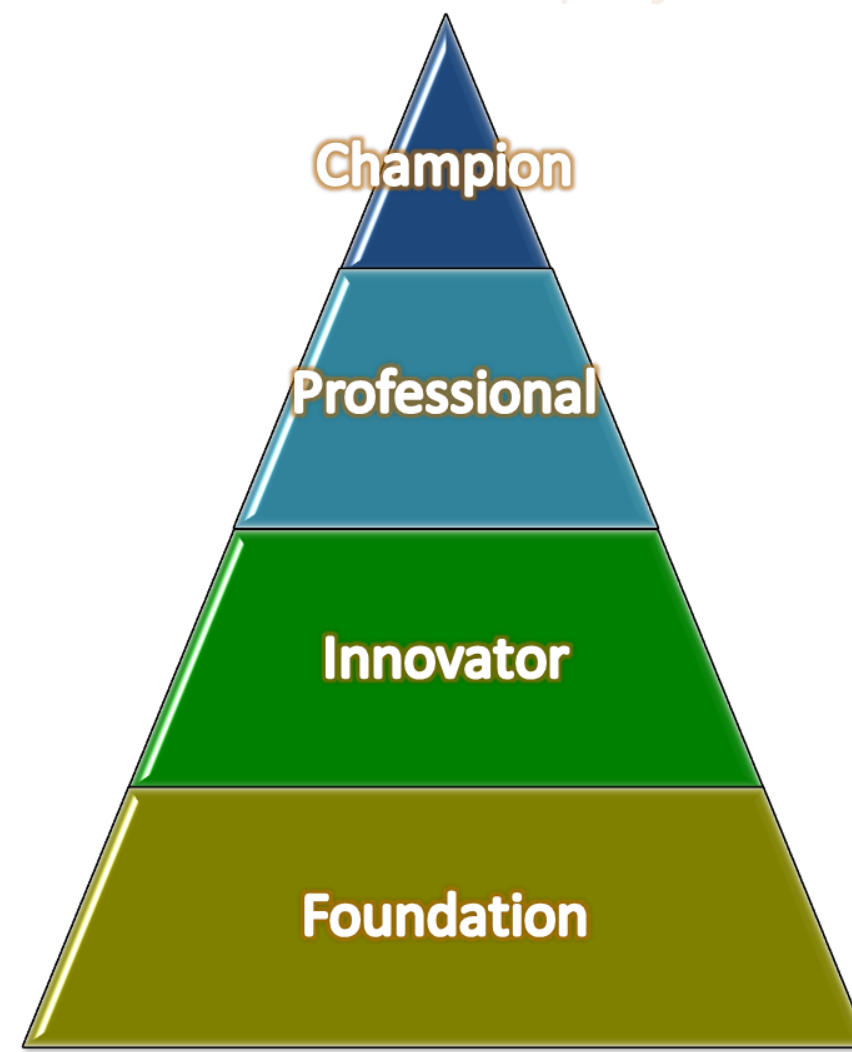
Champion
Professional
Innovator
Foundation

Fig.1
(EPIC Learning Pyramid)

2   Problem Worth Solving

The number of teams attending each review session was **low** (baseline median of 4 teams per session) as each review session was dedicated to participants of assigned wave. The low attendance resulted in potential learning opportunities loss for participants.

The number of learning opportunities per session could be represented using n^2, where **n** refers to the number of teams that had attended each review session (Fig.2).

Furthermore, resources of the Faculty and IQM Training's Team were under utilised when sessions end much earlier than intended.
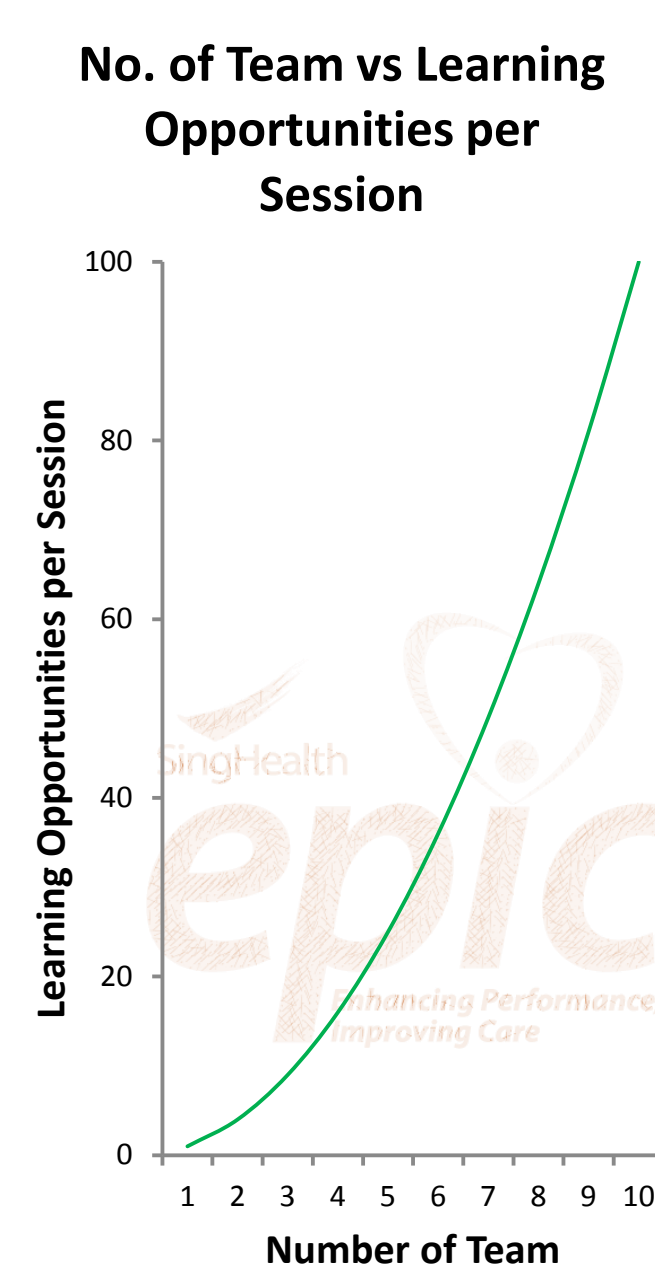
No. of Team vs Learning Opportunities per Session

Fig.2
(Learning Opportunities)

3   Methodology

The Team applied the "Plan", "Do", "Study", "Act" **PDSA** improvement methodology to test the changes, review the effectiveness of the changes made as well as problems encountered and continually seek improvement through a series of rapid PDSA testing.

PDSA 1 - The objective was to have as many teams presenting as possible, maximising the learning. Details are shown in Fig.3.
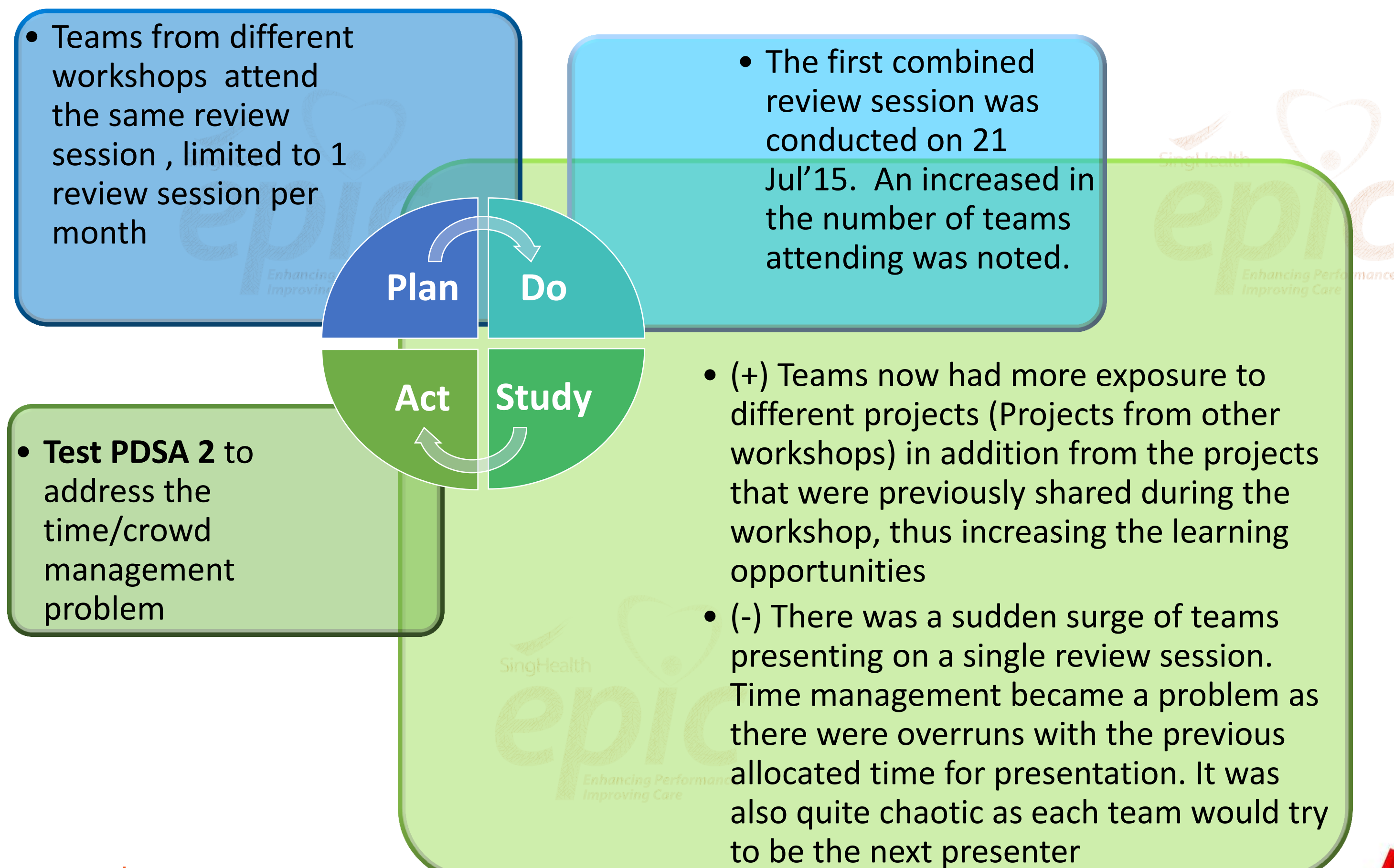
Plan
- Teams from different workshops attend the same review session, limited to 1 review session per month

Do
- The first combined review session was conducted on 21 Jul'15. An increased in the number of teams attending was noted.

Act
- Test PDSA 2 to address the time/crowd management problem

Study
- (+) Teams now had more exposure to different projects (Projects from other workshops) in addition from the projects that were previously shared during the workshop, thus increasing the learning opportunities
- (-) There was a sudden surge of teams presenting on a single review session. Time management became a problem as there were overruns with the previous allocated time for presentation. It was also quite chaotic as each team would try to be the next presenter

Fig.3 (PDSA 1)

SingHealth DUKE-NUS
ACADEMIC MEDICAL CENTRE

PDSA 2 - Learning from PDSA 1, the next objective was to improve time management at the review session and projection on attendance. This was to ensure that the quality of learning was not compromised. Details are shown in Fig. 4.
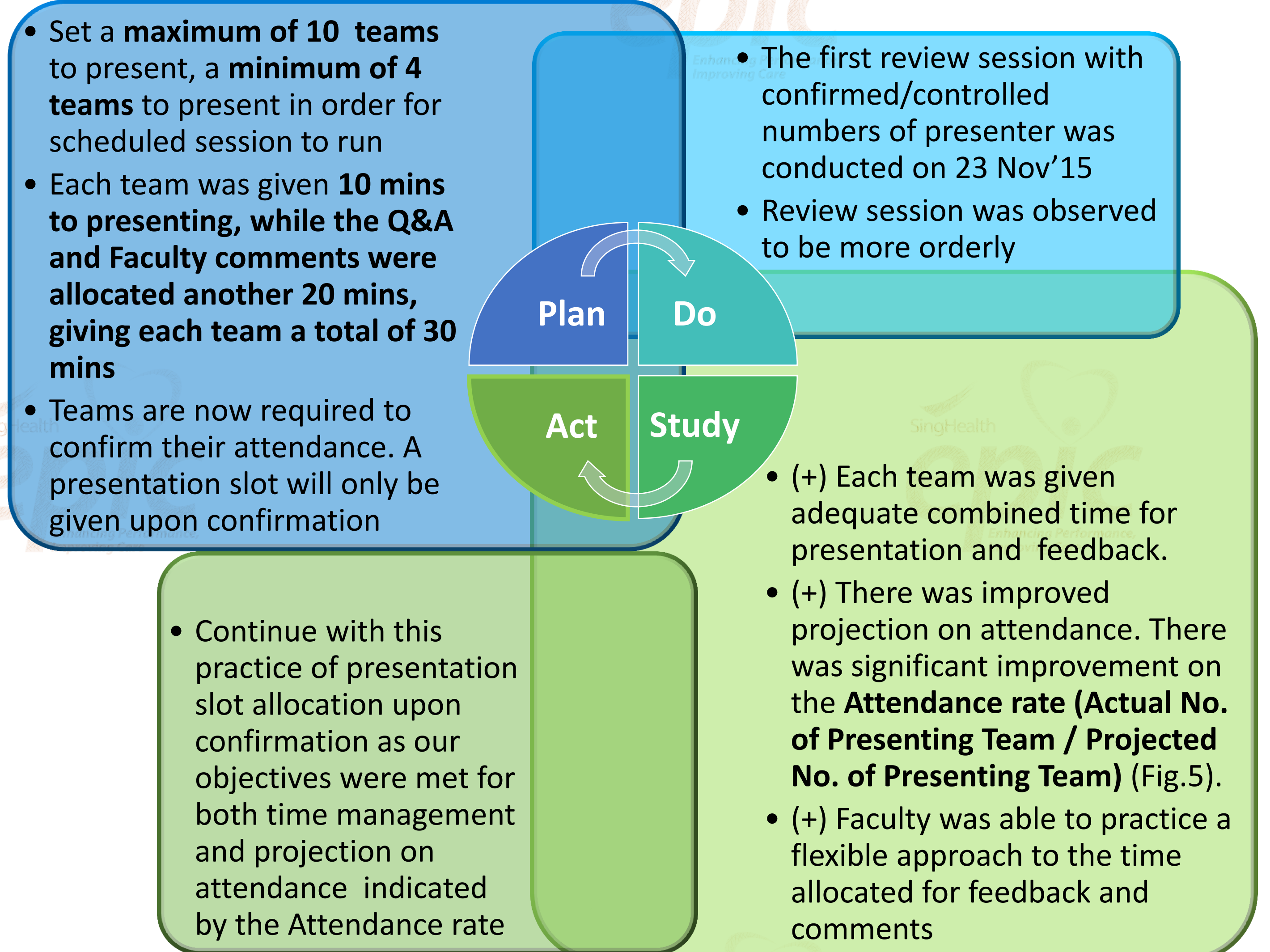
Plan
- Set a **maximum of 10 teams** to present, a **minimum of 4 teams** to present in order for scheduled session to run
- Each team was given **10 mins** to presenting, while the Q&A and Faculty comments were allocated another 20 mins, giving each team a total of 30 mins
- Teams are now required to confirm their attendance. A presentation slot will only be given upon confirmation

Do
- The first review session with confirmed/controlled numbers of presenter was conducted on 23 Nov'15
- Review session was observed to be more orderly

Act
- Continue with this practice of presentation slot allocation upon confirmation as our objectives were met for both time management and projection on attendance indicated by the Attendance rate

Study
- (+) Each team was given adequate combined time for presentation and feedback.
- (+) There was improved projection on attendance. There was significant improvement on the **Attendance rate (Actual No. of Presenting Team / Projected No. of Presenting Team)** (Fig.5).
- (+) Faculty was able to practice a flexible approach to the time allocated for feedback and comments

Fig.4 (PDSA 2)

Attendance Rate
(Actual No. of Team/Projected No. of Team)

Baseline Median = 38%
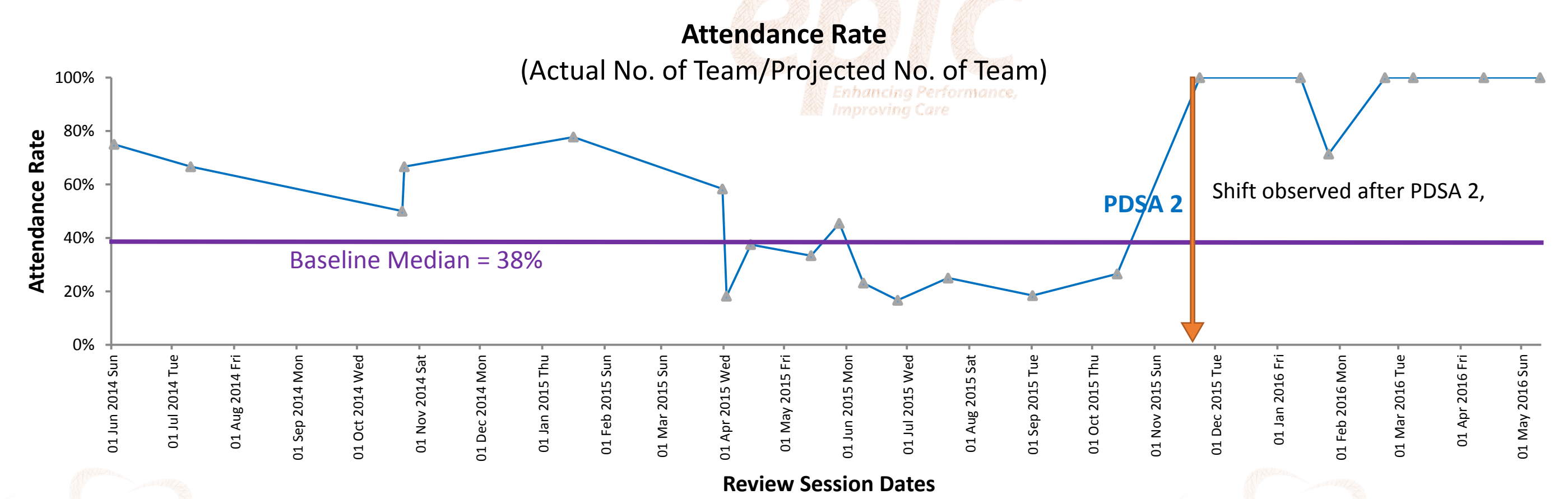
PDSA 2   Shift observed after PDSA 2,

Fig.5 (Attendance Rate)

4   Results

The number of project teams attending the review sessions have increased following the introduction of 2 PDSAs. Fig.6 shows the number of attending teams for each review session. From the baseline median of **4**, a shift was observed, the current median is **7**. Mean Learning Opportunities per session have increased from **22** to **47.9**. **This is an increased of more than 100%.**

Number of Attending Teams

13 teams attended, resulted in overruns and a chaotic event
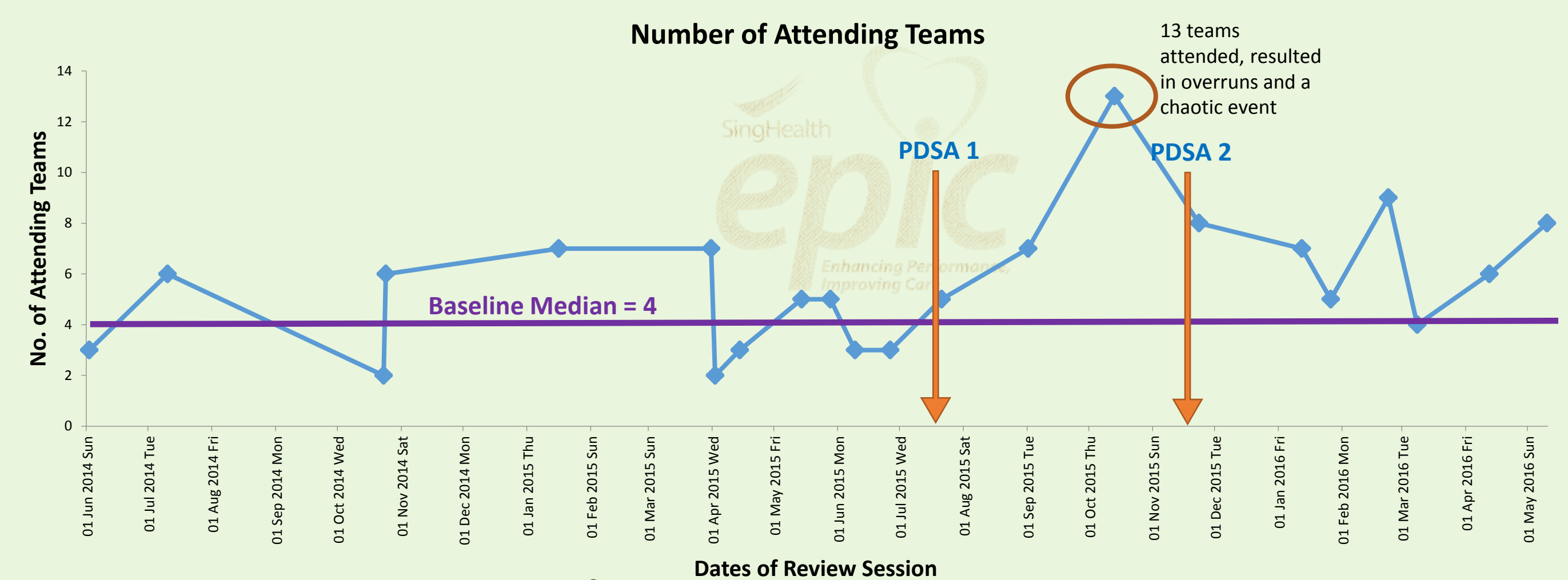
PDSA 1   PDSA 2

Baseline Median = 4

Fig.6 (No. of Attending Teams)

5   Conclusion

The team succeeded in increasing the number of teams attending the review sessions, exponentially increasing the learning opportunities. The quality of learning was not compromised, as adequate time was allocated.

Operationally, the team halved the resources ultlised such as Faculty time and support logistics, through the consolidation of review sessions. Overall there was productivity gained.

PATIENTS. AT THE HEART OF ALL WE DO.®

Singapore General Hospital   KK Women's and Children's Hospital   Sengkang Health   National Cancer Centre Singapore   National Dental Centre Singapore   National Heart Centre Singapore   National Neuroscience Institute   Singapore National Eye Centre   Polyclinics SingHealth   Bright Vision Hospital