**INTRODUCTION**

The Centre of Assisted Reproduction (CARE) is an outpatient fertility clinic which manages 400 IVF cycles a year. Our IVF team comprises doctors, nurses, sonographers, pharmacists and embryologists. The IVF treatment cycle requires accurate communication between staff at various stages to ensure patients consume the correct medication dosages according to the planned schedule. During each visit, patients receive multiple forms and instructions from nurses to guide them with self-administration of medication at home. However, information and communication breakdown at various stages of the IVF treatment process have resulted in medication errors leading to patients not taking the right medication at the right time, which may affect the treatment outcome.

**OBJECTIVES**

To achieve 100% correct medication dosage and schedule for CARE patients on IVF program within 6 months.

**METHOD**

A flowchart (Diagram 1) was used to map out the IVF treatment process and identify points in service delivery causing communication breakdown within the IVF team and between the team and patients. These are highlighted in red.

A fishbone diagram (Diagram 2) was used to brainstorm for the root causes leading to patients consuming the wrong medication dosage at the wrong timing. The top 5 root causes identified by group voting are highlighted in red.

**PDSA CYCLES**

Identified interventions were made in 2 PDSA cycles as seen in Diagram 3 & 4.

**Diagram 3: 1st PDSA cycle**

Changes we have made:

1. **IVF Stimulation Chart**
   - Form is changed to ensure that messages and medication orders made by doctors are clear to follow. It is also easier for doctors’ and staffs’ to acknowledge the changes at all points of service.

2. **Treatment schedule**
   - Patients’ are now actively involved during their program. They are now required to track and update their injection dosage and schedule. All information are compiled into one instruction list instead of separate forms.

**Diagram 4: 2nd PDSA cycle**

Changes we have made:

1. **Pharmacy request slip**
   - The new process makes it easy and clear for nurses to follow medication orders made by doctors.

**RESULTS**

We have achieved 100% correct dosage and medication schedule for CARE patients on IVF program within 6 months.

**SUSTAINABILITY PLANS**

1. Weekly meeting with CARE staff to ensure consistency in workflow
2. Monthly feedback from patients on the use of treatment schedule and pharmacy request slip
3. 6 monthly review with doctors and staff to identify improvements required for the patient program sheet, in order to ensure that we will continue to meet our 100% target for correct dosage and medication schedule to CARE patients.