

## **DML Excellence Awards 2016 Report**

**Project No: 130 – Reduce Maternal Morbidity Associated with Ectopic Pregnancy**

**Address: National Maternity Hospital, Holles Street, D02 YH21**

**Location: National Maternity Hospital IEHG**

### **Brief Description (up to 200 words)**

Complications such as pain and/or vaginal bleeding in the first trimester of pregnancy are one of the most common presentations to the Emergency Unit (EU) in the NMH with spontaneous miscarriages the commonest complication of pregnancy occurring in potentially 20% of pregnancies, that is approximately 15,000 miscarriages / year in Ireland.

Worldwide, ectopic pregnancy (EP) is a leading cause of maternal death in the first trimester. In Ireland the most recent figures indicate an EP rate of 14.8 in 1,000 maternities with mortality rates reduced due to the success of modern treatment management approaches. However EP still remains responsible for 6% of maternal deaths (mainly occurring after an acute initial presentation).

Women who present with signs of hypovolemia demand rapid diagnosis and management, however in approximately 50% of EP cases presenting to EDs, the diagnosis is missed at first assessment. Despite improvements in prompt diagnosis of this potentially fatal condition, there are avoidable factors in over half of the associated deaths.

The widespread availability of a transvaginal ultrasound (TVS) service, delivered by an experienced sonographer, for all acute hospitals/maternity units for the initial investigation of women with a suspected ectopic pregnancy (EP) is vital improvement to reduce maternal morbidity associated with EP.

### **Main goal(s) and aims of the Project**

By allocating a qualified experienced midwife/radiographer sonographer to the Emergency Unit with the appropriate equipment can ensure that appropriate ultrasound examinations take place to aid prompt care, early diagnosis and intervention if necessary. It is primarily beneficial to the women / couples attending the EU by ensuring a safe and quality service at an appropriate time hence avoiding delay in diagnosis. It will reduce the need for further return visits, unnecessary investigations such as quantitative beta HCG blood tests, possibly avoid admission to the hospital and would have a positive impact emotionally avoiding tests, possibly avoid admission to the hospital and would have a positive impact emotionally avoiding uncertainty. Additionally it would also minimise the risk associated with ectopic pregnancies and misdiagnosis as well as provide training and support for junior medical staff who do not have any experience with early pregnancy ultrasound especially at the commencement of their six month rotation into the service (as such rotation occurs twice a year, training and supervision is vital). It is usually the most junior

inexperienced NCHD who covers the EU. During peak hours there is support available from the main ultrasound department however, in the out of hours this service is not available.

### **Outline of Approach – main steps taken to implement the Project**

Allocating a qualified midwife/radiographer sonographer to the EU.

- Ensure senior management mandate and support for the change.
- Met with all relevant staff NCHD's / Consultant/Midwives/Administrators explained the project and its purpose and aim.
- Establish objectives
- Dedicated staff member appointed who was willing to participate in the training and education.
- Equipment available and necessary accessories.
- Staff in the emergency room receptive and supportive of the project.

### **Indicate any other groups who were involved in the Project:**

Midwifery and medical NCHD staff in the antenatal outpatients department

Administration staff

Radiography staff member in the ultrasound department

Midwife manager in the out of hour's emergency service