MBRRACE-UK Topic Proposal Form

Guidance on completing each section of this form is provided in the form of prompt questions. *These are not intended to be comprehensive* but to allow an opportunity to provide the MBRRACE-UK programme team and their Independent Advisory Group with an overview of the rational supporting your proposal.

Completed forms should be submitted electronically to mbrrace-uk@npeu.ox.ac.uk by 31st December 2014.

Topic Title	The effect of pregnancy and lactation on the management and outcome of maternal cancer
Name of Proposer	
Organisation	
Email Address	

1. Overview of the Proposed Topic

Provide a summary of the essential features of the proposed topic; including aims, objectives, and opportunities for quality improvement if this topic is selected.

Maximum response 200 words

Aims; To determine whether pregnancy and lactation alters the outcome for women with cancer. Specifically, the most common cancers of young women, namely breast cancer (according to receptor phenotype and genotype), cervical cancer, ovarian cancer, thyroid cancer lymphoma and melanoma.

Objectives; To determine how many women of reproductive age (18-50 years) were pregnant or lactating when diagnosed with a first malignancy and whether they are at increased risk of cause-specific death compared with non-pregnant women.

Opportunity for quality improvement; Cancer pathology is different even within cancers of the same tissue. Knowledge of outcomes according to type of cancer may influence advice about continuing a pregnancy, breast-feeding and the timing of childbirth in order to start feto-toxic chemotherapy. This advice may reduce the number of late maternal deaths from cancer following pregnancy.

2. Background Information

2.1 Background and clinical context of the proposed topic. Include incidence / prevalence of the condition(s), its impact on the patient and family / carers; and its impact on the NHS and / or social care organisations.

Maximum response 250 words.

Cancer in women of reproductive age (18 – 50 years) is rare and affects approximately 1 in 1500 pregnancies. Whether women with cancer who become pregnant have a worse prognosis compared with women who do not become pregnant is still unclear. Most historical case series have been too underpowered to detect a difference.

Physiological adaptations to pregnancy such as immunosuppression, angiogenesis and high oestrogen levels stimulate cancer growth, in particular some breast cancers and melanoma.

During pregnancy, some chemotherapy is avoided and therefore treatment of cancer is compromised for the sake of avoiding potential harm to the developing fetus.

A diagnosis of cancer in a young person, in particular a pregnant mother has a huge impact on a young family. If maternal deaths from cancer can be avoided due to early child birth or judicious use of chemotherapy or the avoidance of breast feeding, then this will have a major impact on the immediate family and could save resources for social care to the family.

2.2 Relevant data. Are you aware of any other work on this topic? How will this study enhance or add to the body of work that has already been completed?

Maximum response 250 words.

A study using the cancer registry and birth registry of Norway for cancer between 1967-2002 was published on this subject (Stensheim H et al J Clin Oncol 27: 45-51 2009). They showed little difference in outcome except for breast and ovarian cancer diagnosed during lactation and melanoma during pregnancy.

Since then, women are becoming pregnant at an older age, there is more IVF with potent immunosuppression, chemotherapy has improved and typing of cancers (especially breast cancer) has become more sophisticated. These demographic and medical developments have increased the incidence of cancer during pregnancy.

In the UK, cancers are registered and data stored by the Office for National Statistics. There are also regional National Cancer Registration Services (part of Public Health England), which record all malignant and pre-malignant tumours.

Linking the cancer and birth registries in the UK would identify women with cancer who have recently been pregnant. If this linkage is carried out over the last decade (2003-2013), contemporary information subsequent to the Norwegian study will provide useful information for modern management of cancer in pregnancy.

2.3 Standards and guidelines. Are there any current standards relating to this topic. Please give details of any such measures existing for the care areas that can be assessed in this study. These might include, QoFs, CQUINS, NICE Quality Standards, QIPP activities etc.

Maximum response 250 words.

There is no current guidance on management of cancer in pregnancy or lactation from NICE.

There is a group in Belgium led by Frederic Amant, that are actively following up the children of mothers exposed to chemotherapy in pregnancy (see www.cancerinpregnancy.org). Numbers are small (just over 100).

The same group showed no worsening of breast cancer death or recurrence associated with a diagnosis in pregnancy (J Clin Oncol 2012; 45: 6335). But, there was a trend to suggest increased recurrence of some breast cancers due to pregnancy.

The group 'Breast cancer Care' have produced a Factsheet for women diagnosed with breast cancer during pregnancy
http://www.nhs.uk/ipgmedia/national/Breast%20Cancer%20Care/Assets/Breastcancerduringpregnancy%28BCC%29.pdf
This Factsheet gives pragmatic advice, but lacks key objective data on which to guide medical management and to advise pregnant women with a new diagnosis of breast cancer. It gives no advice on other cancers.
There are other groups around the world that have provided similar pragmatic advice without objective data. http://sogc.org/publications/cancer-during-pregnancy/

2.4 Alignment with health policy direction. How does the project sit with current policies and political direction? How does it relate to current topics in the public arena? Is public interest formalised within recognised organisations?

Maximum response 250 words

This topic does not cross-political agendas. In US Federal funding to the NIH for funding cancer research has doubled in the last 5 years. In the UK and around the world, funding for cancer research remains strong.
Reducing maternal and child mortality remains an unmet millennium goal.
An application for supplementary funding for this topic if part funded by MBBRACE initiative would be attractive.

2.5 Key stakeholders. Which groups constitute the key stakeholders for this topic?

Please list.

Cancer Research UK
Individual Cancer charities like Breast Cancer Care, Melanoma research, Breast cancer UK, Eve Appeal (ovarian cancer).

3. Any other information you would like to add

Please add any further information you think would be useful in the assessment of your topic proposal. This may include the potential risks associated with this proposal.

Maximum response 250 words.

This is a challenging topic. It can be comprehensive to include all cancers, or targeted to focus on specific cancers. Breast cancer has been most widely studied in relation to pregnancy and lactation, but uncertainty remains about whether specific types of breast cancer are more aggressive during pregnancy or lactation.

Very little is known about other cancers in pregnancy, but concern exists about melanoma and ovarian cancer.

A National study based on data from cancer and birth registries over 10 years would provide invaluable data for the patient and their clinicians and in certain circumstances, may give clues as to cancer pathology.

The Maternal, Newborn and Infant Clinical Outcome Review programme, delivered by MBRRACE-UK, is commissioned by the Healthcare Quality Improvement Partnership (HQIP) on behalf of NHS England, NHS Wales, the Health and Social care division of the Scottish Government, the Northern Ireland Department of Health, Social Services and Public Safety (DHSSPS), the States of Jersey, Guernsey, and the Isle of Man.

September 2014