Below is an extract from the letter to Prof Derek Manas in response to the data given to the review team comparing the activity levels in Norwich and Cambridge. It concludes that the activity levels are comparable.

The challenge with the data presented by NNUH is that it suggests that resection rates are lower than the resection rates at CUHFT.

This extract, following a discussion with the External Review Panel at the review meeting, demonstrates that the way data is presented is unrepresentative. If looked at over a 3 year period, rather than a snapshot view, the data shows a resection rate of 4.7%.

The Graham Poston article is also attached for your information.

' We feel that the data supplied to you by Norwich relating to liver resection rates at Addenbrooke's is incomplete and unrepresentative.

We draw your attention to Graeme Poston's 2010 article on this subject in the Br J Surg, which you are no doubt familiar with, and is attached herewith. The methodology in the paper examines the proportion of colorectal cancer patients who undergo hepatectomy within a 3 year period from the time of their colorectal tumour resection. This time period is important because it allows an appropriate interval for liver metastases to present.

In relation to the 2012 NCIN data presented to you by Norwich, only a fraction of the patients would have developed metastases at the time of analysis and hence resection rates may be low at the present time. A more representative impression of a unit's resection rate is observed by looking at cohorts of colorectal cancer patients who have had longer to present liver metastases. The NCIN figure for liver resection rate at Addenbrookes for 2011, for example, is 4.3%.
Taking Graeme Poston's methodology, and allowing a 3 year interval from the time of resection of the colorectal primary, we have analysed our resection rates for 2007, 2008, 2009 using data from ECRIC (Eastern Cancer Registry Information Center). Our mean resection rate for this time period is 4.7%. We draw your attention to the graph in Figure 2b of Graeme Poston's article, which shows the variation in liver resection rates by hospital in the UK. Our resection rate of 4.7% is thus no different from that of major colorectal resection units in the country.
Furthermore, this resection rate is achieved in spite of our practice to routinely stage all liver resection candidates with PET scan. We have published that this identifies occult disease in up to 30% of patients for whom liver resection would offer no benefit (Hepatogastroenterology reference attached). PET staging thus has the effect of reducing our resection rates, and we have data to show that long term survival in the PET staged cohort is improved (see attached survival curve data). This data, which we were hoping to present at your visit, has been submitted for publication.
Thus we believe that resection rates for colorectal liver metastases at Addenbrooke's are equivalent to those of comparable specialist units. However, we acknowledge the need for improvements in pathways and liaison with our local units to maximise referral rates.

Part of the reason we are able to achieve high resection rates despite a staging strategy

which includes routine CT, PET CT and MRI is our ability to offer aggressive surgical approaches. This is due to the existing HPB and liver transplant infrastructure at Addenbrooke's. We are the regional centre for hilar cholangiocarcinoma and HCC surgery, which enables us to deal with complex extended resections and manage small for size syndromes post operatively. Also, the liver transplant programme gives us familiarity with techniques such as veno venous bypass, ex situ bench surgery etc, used in cases where we have resected metastases in contact with vena cava and hepatic inflow structures (some examples of which are included in your information folder). We believe these and other points are relevant to the decision making process on liver surgery centralisation.'

Extract sent by Pam Evans 16.09.13