# Improved Access: Quick on the Uptake?

Measuring the Uptake Rate of Radiotherapy & Surgical Treatment for Cancer Patients

#### Tracey Ellison & Chris Ball

NATCANSAT, The Clatterbridge Cancer Centre NHS Foundation Trust, Wirral, Merseyside, CH63 4JY

#### BACKGROUND

The "Radiotherapy Services in England (2012)" report stated "radiotherapy is available on 58 sites, providing improved access". Previously the NRAG report (2007) estimated that over 50% of cancer patients would benefit from radiotherapy.

Recent Malthus modelling using actual treatment data, applicable to current casemix and treatment pathways in the UK, have shown the uptake rate to be 38%.

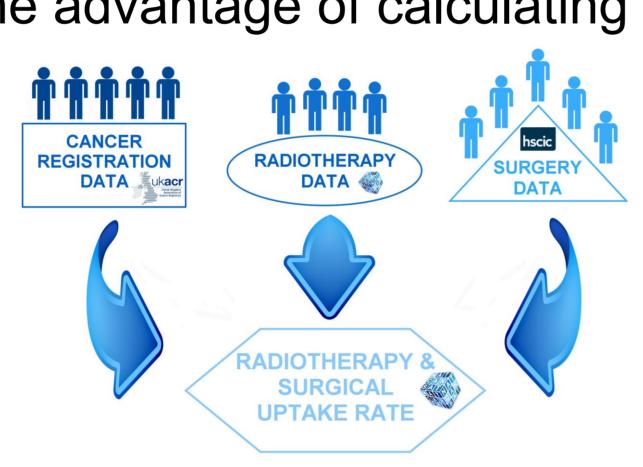
There remains a need to assess current uptake of radiotherapy by resident population, in order to assess the differences.

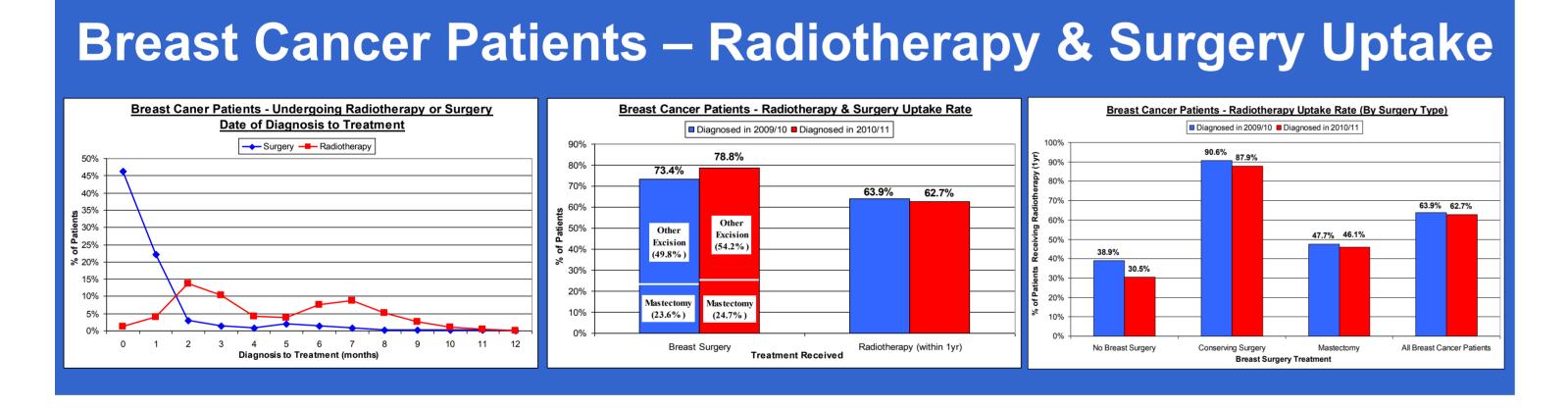
#### METHOD

Cancer Registration data is the principal data source to identify cancer patients. Using a defined linkage technique, the addition of the National Radiotherapy Dataset (RTDS) to the Cancer Registration data allows the percentage number of patients who receive radiotherapy to be calculated.

The utilisation of patient data has the advantage of calculating

actual uptake rate - with predictive analysis only required for future modelling. Surgical uptake rate can equally be reported using Hospital Episodes Statistics (HES) to assess patients who had major cancer surgery.





#### CONCLUSIONS

It is important that providers and commissioners understand any unmet need and variations in radiotherapy uptake.

Analysis for England using the methodology described would report a national (radiotherapy and surgical) uptake rate with the ability of demonstrating any geographical variation.

The addition of the Systemic Anti Cancer Treatment (SACT) data, would allow the overall cancer treatment uptake rate to be calculated.

## Acknowledgements

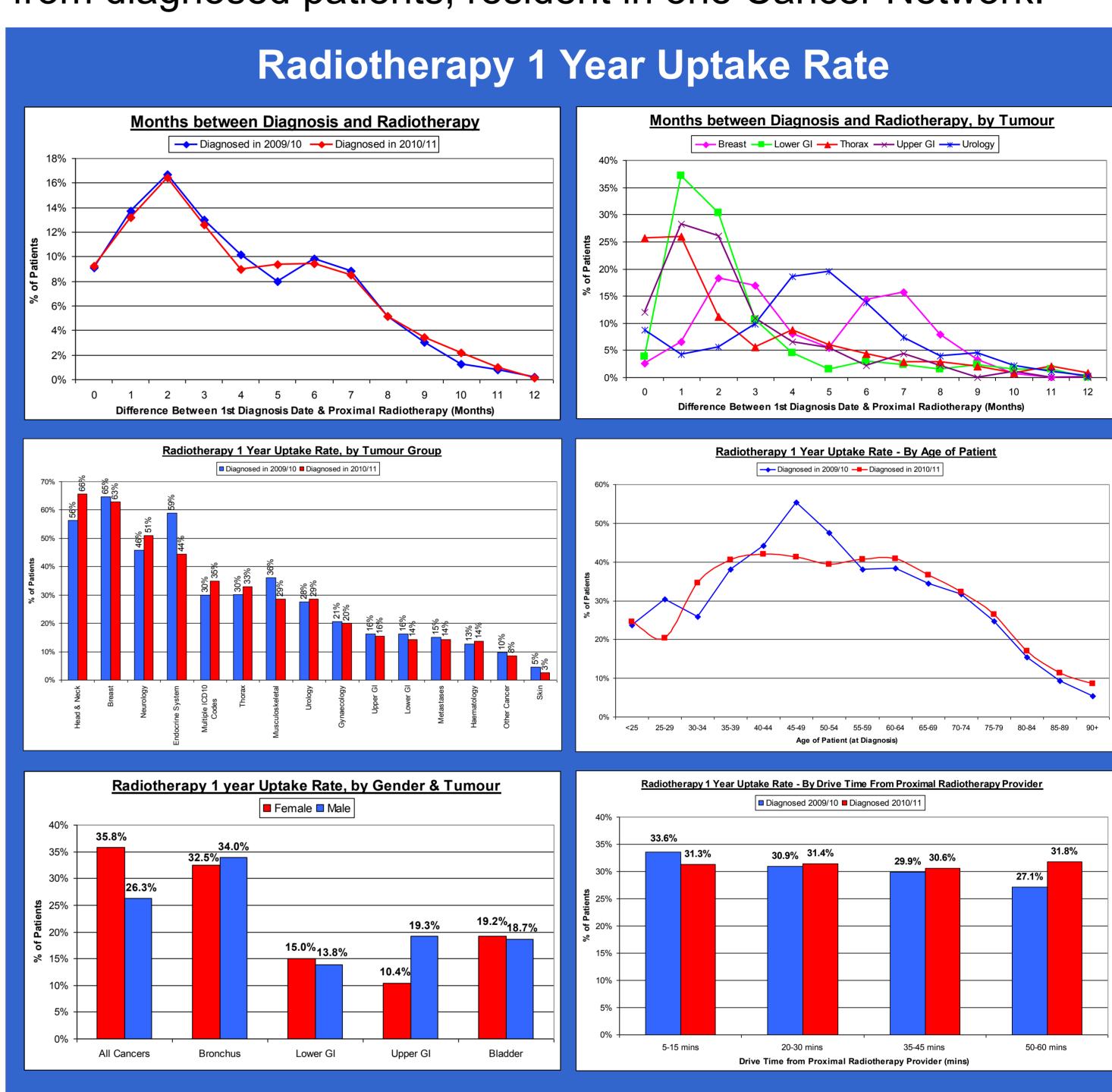
The authors would like to thank the following:

NATCANSAT - A Bannatyne, A Brown, B Cottier, H Forbes, N Jones, D Jordan, A Morris, R Shaw. *With special thanks to S Mitchell for data linkage.*Cancer Registries - ECRIC, NWCIS & NYCRIS. Prof P Hoskin.
Health and Social Care Information Centre (HSCIC)

### RESULTS

Uptake rate can be assessed by several variables. The differences between tumour groups, gender, age, disease stage, deprivation score, and drive time to the nearest radiotherapy facility can be analysed and compared to the Malthus predictions to quantify the potential 'unmet need'.

Mapped analysis can help to identify geographical differences in uptake. The charts below, show examples of the results from diagnosed patients, resident in one Cancer Network.



This analysis has been performed by the author for four cancer networks, where the actual overall one year radiotherapy uptake rate ranged from 31% to 34%, over a variety of different years.

#### **Network & NRAG/Malthus Comparisons** Network A Year of Diagnosed Patien 2004-2005 52% 61% 47% 72% 58% 2% 43% 33% orpus uteri (Endometrium) 46% **29%** 71% 52% 24% 2% 33% 36% 20% 33% 25% 14% 32% 34% Non-Hodgkin lymphoma 54% 13% 25% 7% 4%**6%** 1% 21% 89% **32%** 51% Difference in Radiotherapy Uptake Rate Patient Based (Linked Data) Uptake Rate (2010/11) Compared To Malthus Projection













