

## Spotlight on

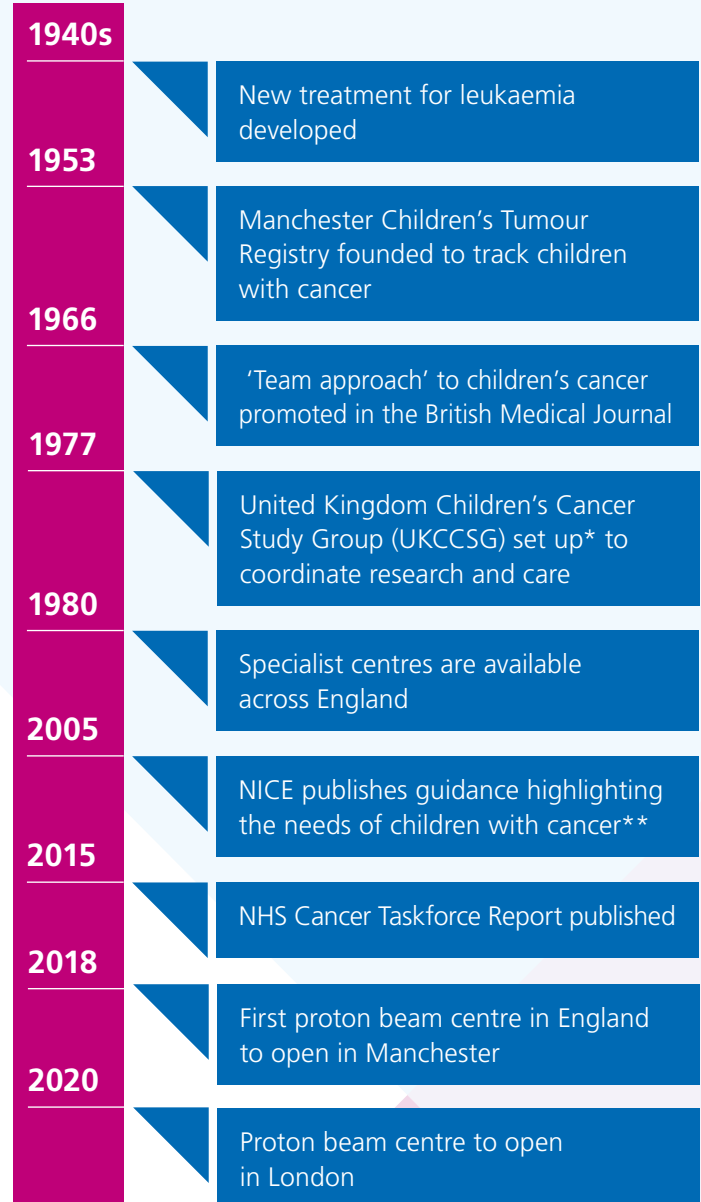
# Cancer in children

Today, more than 8 in 10 children with cancer survive their disease for five years and far beyond. Yet when the NHS was founded in 1948, cancer in children was considered to be fatal.

At around the same time, a new treatment for leukaemia - the most common form of childhood cancer - was developed in America and soon remission became possible for the first time.

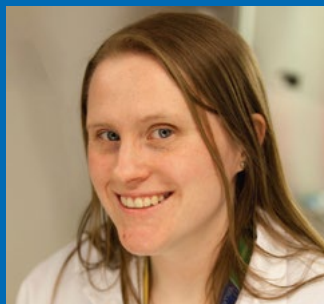
Despite this, by the 60s survival rates were still low, there was little research, care was not co-ordinated and children were looked after by the same clinicians as adults. However, during the 70s and 80s improved diagnostics, developments in chemotherapy and other medical advancements increased survival rates from less than 40 percent to a 10 year survival rate of over 60 percent.

Treatment options now are wide ranging, including surgery, chemotherapy, radiotherapy, stem cell transplants, immunotherapy and targeted therapy. Specialist Principal Treatment Centres diagnose, plan and carry out treatment in partnership with local hospitals. Children needing proton beam therapy are currently funded through the NHS for treatment abroad, but two new NHS proton beam therapy centres are currently under construction with the first set to open in late 2018.



## Beating childhood cancer: Vicky Forster

Vicky Forster was a normal energetic seven year old when she was diagnosed with acute lymphoblastic leukaemia. By the time she was eight, she'd completed four months of intensive chemotherapy treatment and had another two years of treatment to go. She completed her treatment and made a full recovery, going on to study Biomedical Sciences, completing a PhD in leukaemia biology and leading a project researching the neurological side effects she experienced as a child. Now 31 and living in Toronto, she works as a research fellow at the Hospital for Sick Children, writes for Forbes magazine and has given a TED talk on cancer survivorship.



## The future

Future innovations will aim to further improve survival rates and develop kinder treatments, minimising the impact on the lives of patients and their families.

There have been promising developments in targeted therapies which destroy tumour cells while sparing healthy tissues around them. Treatments to stimulate the immune system are already being used, and these are likely to progress in the next ten years. Scientists and clinicians are working together on genetic research which may lead to earlier diagnosis and more tailored treatment.

\*now Children's Cancer and Leukaemia Group

\*\*'Improving Outcomes in Children and Young People with Cancer'