How important/controversial was this paper at the time of publication?
This comprehensively written study formed a key part of the English clinical evidence base for the efficacy of topical fluoride varnish and ingested fluoride tablets in caries prevention, in the 1940s. The results from this carefully executed 4 year prospective clinical study on 250 children in residential care homes in Liverpool augmented the important work carried out by the great Henry Trendley Dean and others in the USA. Interestingly the study did not assess the effect of oral hygiene practice amongst the participants, but did critically state limitations including the fact that the population investigated was a relatively low caries risk one, which would therefore limit the generalisability of the results which concluded no significant benefit of fluoride varnish application and/or tablet ingestion in the reduction of caries incidence over the 2 year period.

How accurate have any predictions been?
The comprehensive discussion from 70 years ago already appreciated the fact that fluoride on its own was not a simple linear, dose-dependent “cure” for dental caries. It acknowledged that its effect may only “postpone” the disease process and that other factors would play a part in the reduction in caries rate, including diet.

How relevant has the paper been to the development of dentistry/patient care/science?
The study was elegantly executed, a testament to high quality clinical science being applied. Even though not all clinical variables could be controlled, a clear effort was made to balance the experimental groups and the sample size and statistical analysis employed were appropriate and thorough. The clinical outcomes, always limited by the weaknesses prevalent in all clinical trials, help colour the development of the use of fluoride in caries prevention, whilst highlighting the important fact that fluoride alone was not a “magic bullet” panacea.

What could/would have happened if this paper hadn’t been published?
Is this issue/topic still relevant to dentistry today?