

Introduction

TICTAC® is a database used in Medicines Information (MI) centres, which provides suggestions to aid drug identification. At the end of 2022, TICTAC® significantly increased subscription fees making the NHS question its worth.

The Association of Scottish Medicines Information Practitioners (ASMIP) agreed to reduce subscription to TICTAC® from 4 MI centres to 1 MI centre, to cover the 7 MI centres across NHS Scotland, from 1st January 2023 to 31st December 2025.

This project focused on assessing the benefit of TICTAC® by determining whether it was possible to retrospectively answer enquiries using resources other than TICTAC®.

Aims

- To ascertain how well freely available internet resources can answer drug identification enquiries compared to using TICTAC® from a time and accuracy perspective.
- To establish if TICTAC® enquiry numbers have reduced over the last 4 years and which health boards they originated from.

Method

Phase 1

- Identify enquiries on MiDatabank from 1st January 2023 to 31st July 2024 that had been answered using TICTAC®.
- Answer these enquiries as simulated enquiries using MiDatabank Trainer and alternative internet resources without using TICTAC®.

Phase 2

- Determine the number of simulated enquiries that could be answered without using TICTAC® and document method used.
- Compare the time taken to complete the simulated enquiries with the original TICTAC® enquiries.

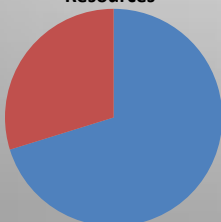
Phase 3

- Research the original enquiries on MiDatabank to find out which health boards they originated from.

Results/Discussion

Over the 19-month study period, 29 drug identification enquiries were found that had used TICTAC®. Some enquiries requested more than one drug to be identified, which resulted in a total number of 47 requests (43 tablets and 4 capsules) to be identified overall. This equated to 1.5 drug identification enquiries per month or 2.5 individual drugs identified per month. Of the 47 requests, TICTAC® identified 29 drugs during the original enquiries, equating to a success rate of 61.7% (see Figure 1).

Tablets or Capsules Identified Using Alternative Internet Resources



Tablets or Capsules Identified Using TICTAC® (Original Enquiries)

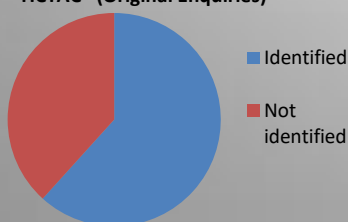


Figure 1 Tablets or Capsules Identified or Not, With or Without TICTAC®

Of the 29 drugs identified with TICTAC®, 27 were medicines currently licensed in the UK, one was ranitidine, which no longer holds a UK licence, and one was a drug of abuse. Of the simulated enquiries alternative resources identified 32 drugs (from the 47 requests), equating to a success rate of 68.1% (see Figure 1). Figure 2 depicts the resources used to identify these 32 drugs: 14 used the EMC website; 13 used the MHRA website; 5 used alternative internet resources (e.g. FDA website). This equates to 84.4% of positive identifications from simulated enquiries using the EMC and/or MHRA websites.

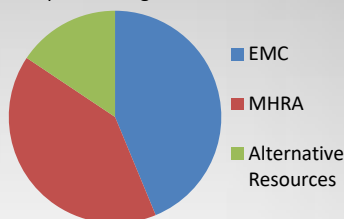


Figure 2 – Resources Used During Simulated Enquiries

Regardless of outcome, the 29 original enquiries took a total of 1222 minutes compared to 1304 minutes for the 29 simulated enquiries. This calculated to an average of 42 minutes per TICTAC® enquiry compared to 45 minutes without TICTAC®. Of all the enquiries included, 11 of the simulated enquiries came to the same positive identification as the originals. These were deemed most appropriate for time comparison analysis (see Figure 3).

Of the time comparison enquiries, simulated enquiries took a total of 80 minutes longer to complete than the originals, which equates to an average of 7 minutes extra time per enquiry.

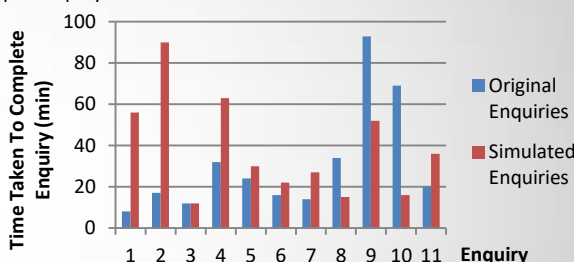


Figure 3 - Time Taken to Complete Original Enquiry vs. Simulated Enquiries With Same Positive Identifications

The majority of TICTAC® enquiries originated from NHS Grampian, Lothian and Tayside. Small numbers make it difficult to assess whether there has been an overall decline over the last 4 years. Twenty-six enquiries were received in 2022 and 29 between 1st January 2023 and 31st July 2024 (see Table 1). It is also unknown if some MI centres checked EMC/MHRA prior to submitting TICTAC® enquiries.

Table 1 – NHS Scotland Health Boards Submitting TICTAC® Enquiries

Health Board	No. of Enquiries (1/1/23 – 31/07/24)	No of enquiries in previous years
NHS Grampian (includes NHS Highland)	8	2020-5 2021-5 2022-9
NHS Greater Glasgow & Clyde (GGC) (includes NHS Lanarkshire / Forth Valley & NHS Ayrshire & Arran)	4	2020-10 2021- 3 2022-4
NHS Lothian	7	2020-9 2021- 10 2022-9
NHS Tayside	10	2020-9 2021- 6 2022-4

Conclusions

- Overall, TICTAC® does not appear to confer any great advantage from an efficacy point of view in being able to identify drugs when compared to alternative internet resources, including EMC and MHRA websites.
- The extra time to complete enquiries without TICTAC® was relatively short in most cases.
- TICTAC® enquiries received were relatively even across health boards and it was difficult to conclude if there had been a general decline over recent years.
- The findings from this project will be shared with the UKMi QRMG (Quality and Risk Management Group).