After reporting an alleged sexual assault to the police the complainant will often undergo a physical examination by a MEDSAC doctor. During this examination a Medical Examination Kit (MEK) is used for collecting evidence from the victim for further analysis by forensic scientists. The current practice for sample collection and analysis is comprehensive and typically involves collecting and processing most or all of the samples within the MEK. This process can very time consuming, costly and inefficient.

This review of the MEK was conducted using the information of 228 cases from the financial year 2015 from the Auckland and Christchurch site. All these cases had a female complainant. An evaluation was made on how often each sample type within the kit was used and compared with the evidential value obtained. For most sample types a success was defined as obtaining a foreign DNA profile.

This review has shown that in the majority of cases there is limited value in the collection of the trace evidence samples (e.g. non-genital). Recommendations have been made for each sample type within the kit. These findings show there is some support for redesigning the standard medical examination kit and prioritising some sample types and these findings will be discussed.