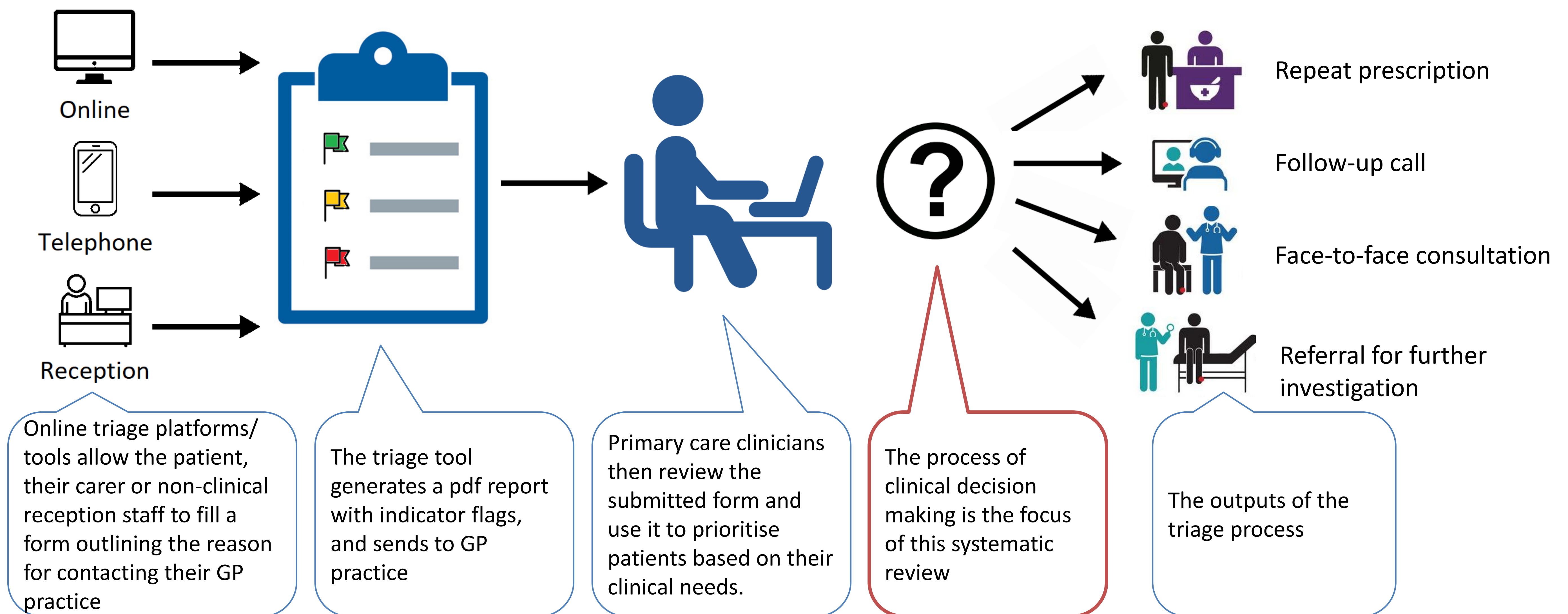


# Patient facing online triage tools and clinician decision making: a systematic review

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## 1 Background

- There is a growing interest, from both NHS England [1] and the Royal College of General Practice (RCGP) [2], in use of patient facing online triage tools.
- The remote triage decision is different from in-person clinical decision making, as non-clinical factors (e.g., eye contact, patient voice and the patient context) are removed [3] [4].
- The purpose of this review is to evaluate recent research on how clinicians make clinical decisions when using primary care online triage tools.

## 2 Review question

How do primary care clinicians use online triage tools for clinical decision making in primary care and what are the clinical, patient and health system outcomes associated with online triage tool use?

## 3 Objectives

1. To determine how primary care clinicians use online triage tools for clinical decision making in relation to patients
2. To assess the impact of using online triage tools for clinical decision making on patient and health system outcomes.
3. To assess clinician views and experiences of using online triage tools for clinical decision making.

## 4 Systematic Review Steps

- Designed search strategy
- Search carried out in five databases (Medline (Ovid SP), Embase (Ovid SP), Cumulative Index to Nursing and Allied Health Literature (CINAHL), Web of Science and SCOPUS). The search resulted in **10,138** papers
- Data management and screening (removing duplicated, titles and abstracts screening\*, full-text screening, backward and forward citations search)
- Data extraction
- Risk of bias and quality assessment
- Data synthesis

\*current stage of the review

## 6 Outcomes of interest

- Patient clinical outcomes relating to clinical-decision making including diagnosis, severity of diagnosis, time to treatment, time to first investigation, time to referral, alignment with professional guidance on investigation, treatment, or referral
- Primary care practitioner experience relating to clinical decision-making including confidence in diagnosis, and comfort with decision making
- Healthcare system outcomes relating to clinical decision-making including frequency of primary care appointments via different models, clinical workload, number of ED attendance, emergency admissions, healthcare costs.

## 5 Tool characteristics

### Inclusion characteristics

- Web or app-based tools,
- that are used at primary care settings, and
- used by primary care clinicians and their adult patients.

### Exclusion characteristics

- Tools that are used only outside the primary care settings;
- that assess specific symptoms and features rather than providing triage, e. g. symptoms of diabetes, BMI check;
- that provide access to a direct GP consultation; or
- that are under development; also
- Digital symptom checker platforms where the tool provides likely diagnosis, and does not inform the triage

### Additional exclusions

- Studies that examine hypothetical clinical experience;
- that are about algorithm or artificial intelligence (AI) development; &
- about technicality of integrating the triage tools with clinical records systems.

## 7 References

1. NHS England, "The NHS Long Term Place," NHS England, London, 2019.
2. RCGP, "Fit for the Future: A vision for general practice," Royal College of General Practice, London, 2019.
3. M. Brady and K. Northstone, "Remote clinical decision-making: a clinician's definition," Emergency Nurse, vol. 25, no. 2, 2017.
4. J. Banks, M. Farr, C. Salisbury, E. Bernard, K. Northstone, H. Edwards and J. Horwood, "Use of an electronic consultation system in primary care: a qualitative interview study," British Journal of General Practice, vol. 68, no. 666, pp. e1-e8, 2018.