

## PP109 Use Of Speech Recognition In Medical Reports: A Systematic Review

### AUTHORS:

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### INTRODUCTION:

Speech recognition is increasingly used in medical reporting. The aim of this article is to identify in the literature the advantages and weaknesses of this technology, as well as barriers and facilitators to its implementation.

### METHODS:

A systematic review of systematic reviews has been conducted in PubMed, Scopus, Cochrane Library and Center for Reviews and Dissemination up to August 2017. The grey literature has also been consulted. The quality of systematic reviews has been assessed with the AMSTAR checklist. Inclusion criteria were to use speech recognition for medical reporting (front or back-end). A Survey has also been conducted in Quebec, Canada, to identify the dissemination of this technology in this province, as well as the factors of success or failure in its implementation.

### RESULTS:

Five systematic reviews were identified. These reviews indicated a high level of heterogeneity across studies. The quality of the studies reported was generally poor. Speech recognition is not as accurate as human transcription but can dramatically reduce the turnaround times for reporting. In front-end use, medical doctors need to spend more time for dictation and correction than with human transcription. With speech recognition, major errors can be up to three times more frequent. In back-end use, a potential increase in the productivity of transcriptionist is noted.

### CONCLUSIONS:

Speech recognition offers some advantages for medical reporting, the main one being a reduction in turnaround times. However, these advantages are challenged by an increased burden for medical doctor and risks of additional errors in medical reports. It is also hard to identify for which medical specialties and which

clinical activities the use of speech recognition will be the most beneficial.

## PP110 The Prophylactic Removal Of Impacted Third Molars: A Systematic Review

### AUTHORS:

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### INTRODUCTION:

Impacted third molars (I3Ms) are blocked from fully erupting; many I3Ms are asymptomatic, however there could be pain and pathological changes. Historically, I3Ms were removed prophylactically. Current options in the United Kingdom include either retention with standard care (watchful waiting), or removal due to pathological changes. We conducted a systematic review of the prophylactic removal of asymptomatic impacted mandibular third molars (IM3Ms) compared with standard care.

### METHODS:

We searched five electronic databases from 1999 onwards. Inclusion criteria: randomized and non-randomized trials, observational studies, and systematic reviews (SRs) comparing the prophylactic removal of IM3Ms with standard care or studies assessing the outcomes of either approach; outcomes included pathology associated with retention, postoperative complications, adverse effects of treatment and health-related quality of life. Two reviewers independently screened all titles and/or abstracts, applied inclusion criteria to potentially relevant publications, and quality assessed and data extracted the included studies. No meta-analysis or network meta-analyses were undertaken.

### RESULTS:

Following screening of 11,373 references, 13 studies (four cohort studies and nine SRs) were included. One cohort study investigated the prophylactic removal of asymptomatic IM3Ms in comparison with standard care and retention, two investigated the prophylactic removal of asymptomatic IM3Ms, and one studied the retention and standard care of asymptomatic IM3Ms. Two studies reporting surgical complications found no

serious complications; however, one study reported intense pain and postoperative infection. Pathological changes due to retention of asymptomatic IM3Ms were reported by three studies. Nine SRs of the management of third molars were included in this review, however none focused solely on IM3Ms.

**CONCLUSIONS:**

Consistent with previous systematic reviews, we found no RCT data to support or refute the prophylactic removal of asymptomatic IM3Ms, despite extensive searching of the literature. The review however did identify evidence from two longitudinal studies demonstrating the outcomes when asymptomatic IM3Ms are left in situ.

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## PP111 Toward Healthy Coagulation In Hemophilia

**AUTHORS:**

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**INTRODUCTION:**

Healthcare advances in hemophilia have led to near-normal life expectancies in a disorder previously associated with early death. Unlike other disorders where the therapeutic goal is to restore deficiencies to normal levels, prophylaxis in hemophilia is used to achieve a plasma level of FVIII > 1%, such that severe hemophilia may be reduced to a moderate/mild phenotype. With the development of new therapies, treatment goals are evolving from on-demand treatment or prevention of bleeds to one where the risk of bleeding is minimal/absent. To accelerate this development, a new treatment paradigm is needed, with consensus from key stakeholder communities, to facilitate a shared vision for the future of hemophilia healthcare.

**METHODS:**

A panel of hemophilia providers, patient advocates, and industry representatives convened to develop a new treatment model that establishes specific treatment milestones and target outcomes in a stepwise fashion, culminating in a progressive definition of cure.

**RESULTS:**

To represent the collective experience of hemophilia for patients and treaters around the world, the following

treatment milestones were defined based on optimized outcomes: (i) Sustain Life – prevention of premature death; (ii) Minimal Joint Impairment – improved quality of life; participation in activities of daily living; (iii) Freedom From Spontaneous Bleeds – ability to engage in low-risk activities; (iv) Attainment of ‘Normal’ Mobility – participation in work, career, and family life without restriction; (v) Able to Sustain Minor Trauma – more unrestricted lifestyle; (vi) Ability to Sustain Major Surgery or Trauma Without Additional Intervention – no dependency on specialized healthcare; (vii) Normal Hemostasis – optimal health and well-being; and (viii) Cure – health equity.

**CONCLUSIONS:**

With milestones for disease management leading toward normalized hemostasis, this treatment model provides a vision to improve hemophilia care for all patients. And by providing achievable outcomes, the community—patients, treaters, and their industry partners—has a clear path to achieve that goal.

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## PP113 Towards A Systemic Approach of Value Judgment In HTA

**AUTHORS:**

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**INTRODUCTION:**

The fact that HTA is a value-laden process is recognized in the literature. This is one of the reasons for promoting a better integration of ethics in HTA processes. Although what is meant by value-judgment (VJ) and how it can be used in HTA is not clear for some authors; others have proposed the elicitation of implicit VJs, to make them more explicit, as one way for clarifying the role ethics may play in HTA. In order to clarify what a VJ is, a conceptual analysis is needed to distinguish it from a factual-judgment and see how they diverge on certain aspects and converge on others.

**METHODS:**

The distinction between VJs and factual-judgments was debated in the fifties. At the core of the philosophy of