EPRO OUTSOURCE MODULE

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CONTENTS

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EPRO OUTSOURCE MODULE

OVERVIEW

Templating / workflow, digital dictation, speech recognition and outsourcing are all valuable ways to support the production of clinical letters and documents. Outsourcing refers to the process of sending audio work to external typists for transcription.

Commonly the work requires checking by 'home' secretaries, on return. This may involve transfer to correct templates, processing of tasks identified during the dictation and it is important this process is fluent.

A critical element of managing outsourcing is the ability both to monitor the quality of the outsourced work, and to feed back any corrections necessary, so that knowledge of local culture is transferred to the outsourcing team, and any mistakes are not perpetuated.

CURRENT ISSUES WITH OUTSOURCING

Too much work
There may be simply be too much work for the available secretarial resource due to a long term mismatch in resource availability. Outsourcing can help here by allowing the existing secretaries to work more productively checking transcriptions returned from the outsourcing team.

Variation in demand
Short term variations in demand due to extra clinics etc. may cause a transcription backlog resulting in breached targets.

Variable resource
Permanent secretaries may be off with sick leave or maternity leave, need use of bank staff.

- Long term resource mismatch
- Short term variation in demand
- Secretary sick / maternity leave
- Formatting issues
- Inaudible audio fragments
- Poor support for structured documents
- Missed instructions
- Variable transcription quality
- Poor capture of quality metrics
- Repetition of the same mistakes

Formatting issues
Outsource transcriptionists may struggle to achieve the same standard of formatting as current secretaries.

Inaudible fragments of dictation
Outsourced transcribers may be less adept at deciphering fragments of dictation which are mumbled or of poor audio quality.

Documents containing multiple fields
There is an increasing trend towards creation of documents with multiple fields in line with current recommendations from the Royal College Physicians. If these need manually copying / pasting to the correct fields in Epro, this is both inefficient and demotivating for secretaries.

Lost instructions
Clinicians commonly dictate instructions to their secretaries as well as the document content. These are at risk of being missed unless there is provision for handling them.

Poor quality of transcription
The quality of outsourced transcription may vary, either between providers, or within one provider. There needs to be a means both of capturing this, and secondly improving it.

Difficulty capturing and monitoring quality
Capturing quality assessments may be perceived as onerous by secretaries leading to incomplete assessment of transcription quality.

Repetition of the same mistakes
Outsourced typists may be unfamiliar with exact requirements of the medical secretaries / clinicians. It is inevitable they will make mistakes and if these are repeated this is likely to very irritating and lead to disengagement by the medical secretaries. Monitoring quality is of little value, unless there is a workable means of improving it, for example by avoiding repetition of the same mistake.

SPECIAL ISSUE – MOTIVATION OF EXISTING SECRETARIES

Outsourcing can be really valuable to secretaries in assisting with management of variation in demand, absence of colleagues and upholding overall transcription targets. It can also fit within an agenda of using secretaries to make the most of specialized skills which only they possess, whilst removing tasks which could be done by others with more generic skills.

However, outsourcing may also be perceived as a threat to the jobs and livelihoods of existing secretaries. Inevitably the existing secretaries will be better at transcribing, particularly difficult content, and will know the patterns of their consultants, with whom they have valuable relationships.

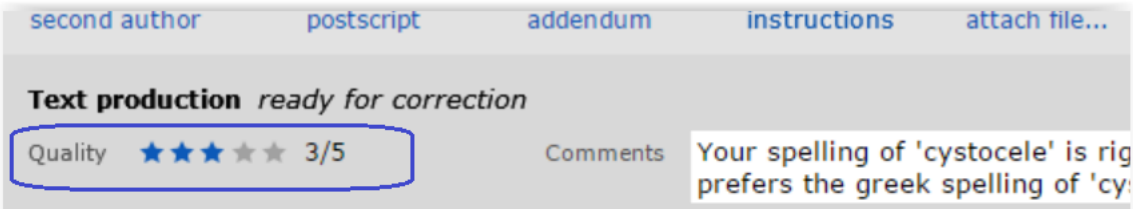
Some secretaries have described the process of checking returned transcriptions as mundane and demotivating. This is particularly the case where it involves mundane tasks such as inserting patient demographics, or copy/pasting between fields.

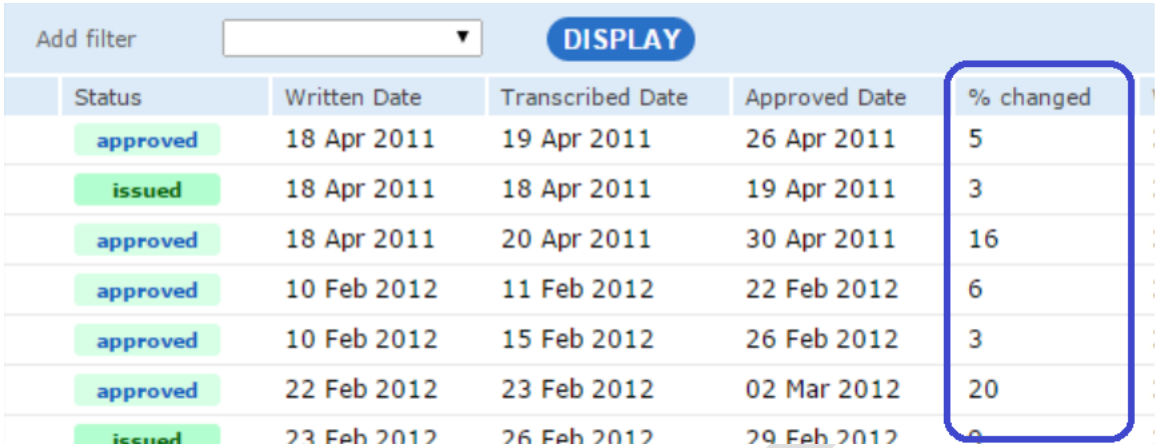
The Epro outsource module addresses this with four strategies:

1. All mundane elements such as insertion of demographics / copying between fields are handled by the template system
2. Fragments of unclear audio are highlighted in the text and can be played with one click
3. There is a quick and easy way for the secretaries to rate the quality of each transcription
4. Any changes made by the secretaries, may be automatically highlighted and fed back to the transcription service provider, to avoid repeated mistakes.

Thus the home secretaries are placed in a role of 'senior secretaries' overseeing the work of the transcription service providers, working in an efficient process making the best use of their specialist skills.

FEATURES IN DETAIL

FEATURE	BENEFIT
Full integration with existing Epro templates	Minimises setup costs Saves time secretaries would spend on correcting formatting / layout.
Demographics insertion managed automatically. (Outsource providers are not generally permitted access to patient demographics for IG reasons.)	Saves time for secretaries manually inserting patient demographics.
Quality capture 1 – 5, by secretaries	Provides a quantifiable measure of both secretary satisfaction and quality of transcription.
 *Simple, intuitive capture of transcription quality (subjective)*	
Automatic calculation of % words changed by secretaries	Provides an objective measure of transcription quality.



The percentage of words corrected by secretaries for each job is automatically calculated. This provides objective quality monitoring.

Optional additional comments	Secretaries can add comments which are fed back to transcriptionists to avoid repeated mistakes

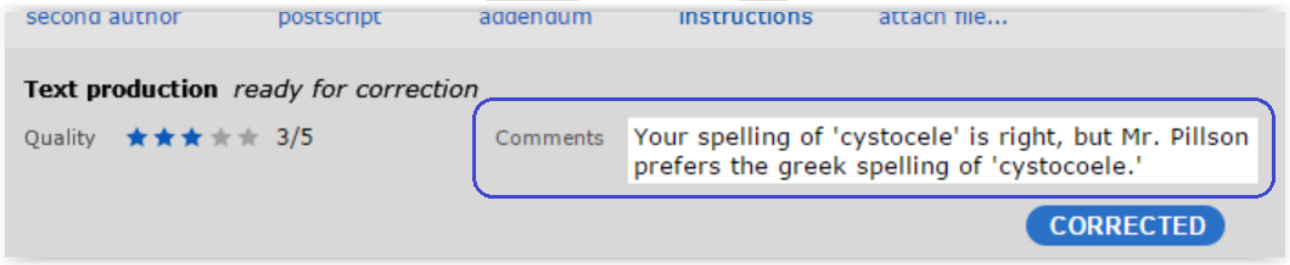
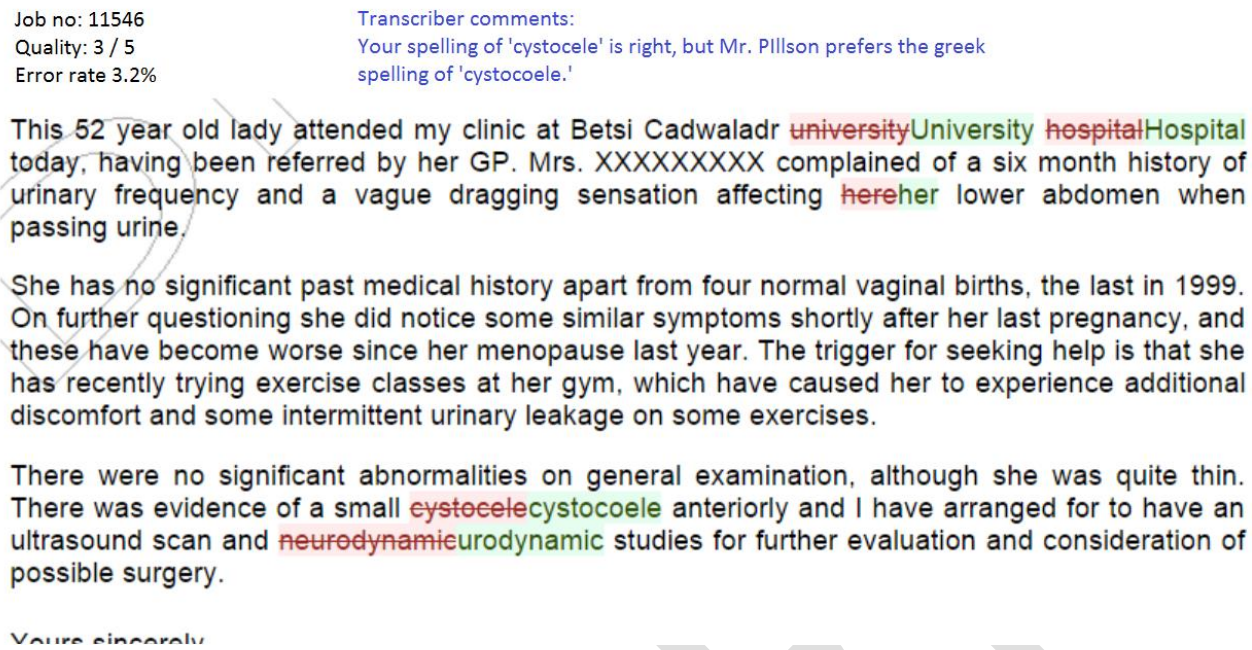


Illustration of ability to add additional helpful comments where the automatic reporting of corrections (see below) may not be sufficient.

Automatic feedback of changes	Maximum assistance is provided to the TSP in transferring the knowledge of the secretaries, to improve further accuracy.



Job no: 11546
Quality: 3 / 5
Error rate 3.2%

Transcriber comments:
Your spelling of 'cystocele' is right, but Mr. PIllson prefers the greek spelling of 'cystocoele.'

This 52 year old lady attended my clinic at Betsi Cadwaladr ~~university~~University ~~hospital~~Hospital today, having been referred by her GP. Mrs. XXXXXXXXX complained of a six month history of urinary frequency and a vague dragging sensation affecting ~~here~~her lower abdomen when passing urine.

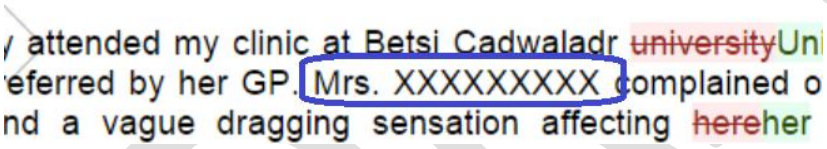
She has no significant past medical history apart from four normal vaginal births, the last in 1999. On further questioning she did notice some similar symptoms shortly after her last pregnancy, and these have become worse since her menopause last year. The trigger for seeking help is that she has recently trying exercise classes at her gym, which have caused her to experience additional discomfort and some intermittent urinary leakage on some exercises.

There were no significant abnormalities on general examination, although she was quite thin. There was evidence of a small ~~cystocele~~cystocoele anteriorly and I have arranged for to have an ultrasound scan and ~~neurodynamic~~urodynamic studies for further evaluation and consideration of possible surgery.

Yours sincerely

Illustration of feedback to transcription service provided, illustrating return of quality and error rate statistics, comments from secretary, automatic highlighting of corrections.

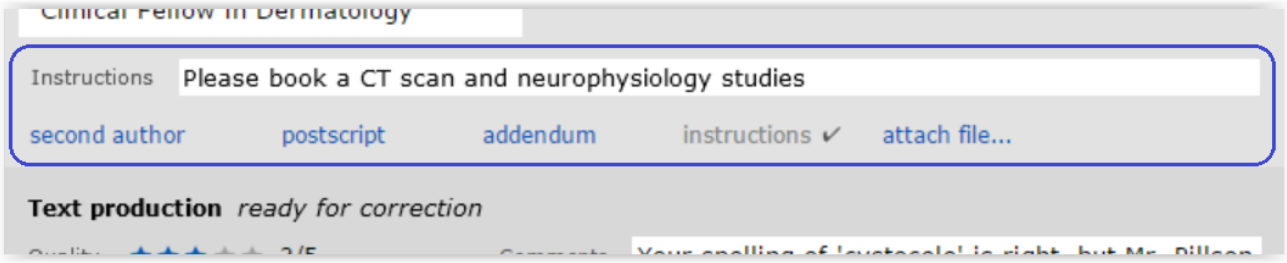
Management of patient names	Prevents further IG breach



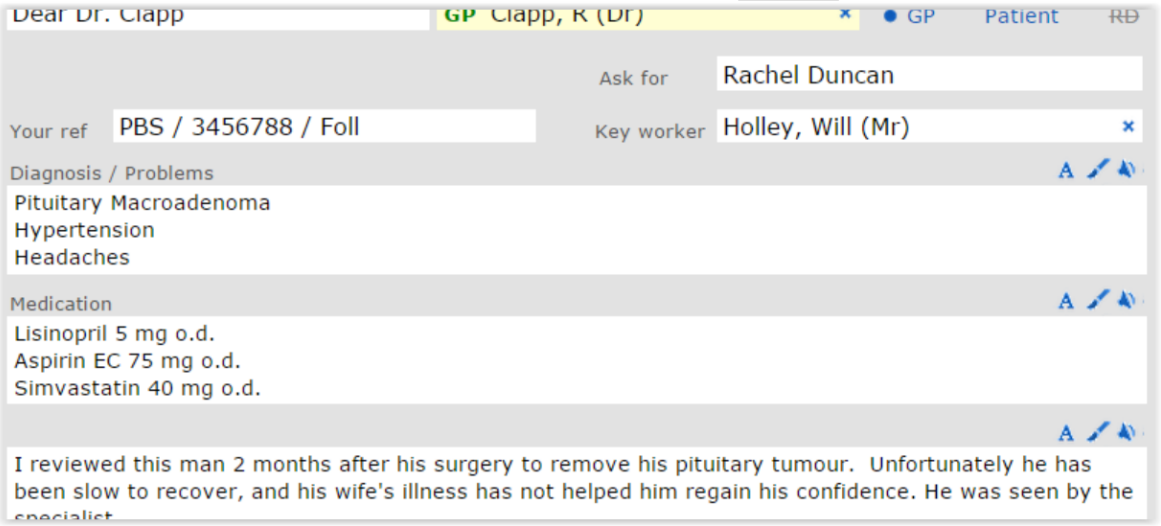
attended my clinic at Betsi Cadwaladr ~~university~~Uni
eferred by her GP. Mrs. XXXXXXXXX complained o
nd a vague dragging sensation affecting ~~here~~her

Patient identifiable information must not be shared with outsource companies. Although clinicians are requested not to include it, these instructions are not always followed. Patient names and identifiable information is automatically removed from outsource company document feedback to prevent further IG breach.

Specific field provided for handling instructions dictated by the author.	Allows instructions dictated by author to be accurately transferred to secretary so they are not missed, and no time is spent removing them from the body of the letter. They are also auditable



Support for structured documents (e.g. where separate fields for diagnosis etc.)	Avoids 'demotivating' factor of secretaries copying / pasting between separate fields in the template.



Templates with structured fields (as illustrated above) are becoming more common and are valuable in managing information. Where clinicians dictate information in sections, this is automatically inserted in to the correct field in the template without the need for copy and paste.

Support for playback of difficult audio fragments	Saves time for secretaries when filling in gaps in audio.

[image to be added]

Parts of audio which are hard to hear are highlighted, and one click allows secretaries to play these back.

Support for comments in made by transcriptionists	Aids communication between transcriptionists and secretaries.

[image to be added]

Transcriptionists can make clarification comments which are visible to secretaries.

PRE-REQUISITE EPRO MODULES

The following other modules are required as a minimum to use the Epro bed management module

- Epro Core Module
- Epro Clinical Correspondence Module

SUPPORTING EPRO MODULES

Full reporting / monitoring ability is available via the basic reporting grids on the reporting page. However, additional graphical reports are available in the **EPRO REPORTING DASHBOARD MODULE**

EPRO MODULES ENHANCED BY EPRO HANDOVER LIST MODULE

EPRO CLINICAL CORRESPONDENCE MODULE can benefit as outsourcing is added as an additional means of creating correspondence.

EPRO DIGITAL DICTATION MODULE is used to link with / capture the audio files to be sent to the outsourcing company.

EPRO DISCHARGE SUMMARY MODULE allows the capture of dictated information which can be handled by outsourcing.

BENEFITS SUMMARY

Patient safety is improved because

- **Dictations are transcribed more rapidly**
- **Information is available more quickly**
- **Output from appointments is communicated to the GP more quickly**

Clinicians benefit because

- **review of recently dictated documents is quicker and less risky**
- **information (particularly from other specialties with backlogs) is available more quickly**

- **they still retain input from their experienced secretaries**
- **they can be confident that instructions are still executed correctly**

Secretaries can

- **feel in control of the outsourcing process, without fearing loss of quality**
- **spend less time on routine typing, and focus more on correction**
- **be confident instructions (such as booking scans) are executed more quickly**
- **have a mechanism to cope with workload and backlog overflow**
- **have fewer interruptions with queries on delayed transcriptions**

Outsourcers improve their service because

- **simple quality metrics for every transcription job are available**
- **they may receive individual feedback on each job**
- **all corrections made by secretaries are available in an easy to read format (changes highlighted)**

The Trust benefits from

- **better compliance with letter production targets**
- **avoidance of CQUIN fines when letter production is delayed**
- **more productive staff**
- **improved compliance with governance requirements around document generation**

EPRO MODULES SUMMARY

Epro is built on a modular system that allows trusts to control which features they use and which they don't. In addition to the core module and digital dictation, there are 13 modules that can be added as required, enabling a tailored solution for hospitals' requirements.

EPRO CORE is the starter module for any configuration of the Epro clinical toolkit. It includes patient demographics, GP and GP practice demographics, PowerSearch, the Epro template engine, a user module with granular security framework, user activity logging, audit, server based generation of word documents and basic reporting facilities. The HL7 interface allows trusts to monitor and track all inbound HL7 messages, and the responses sent by Epro and any failures. There is the option to edit message failures to correct issues and resend them. End users are able to author their own help material to be integrated into the Epro help centre and adjust some help related configuration settings.

EPRO DIGITAL DICTATION MODULE integrates Epro with digital dictation systems to allow the capture of dictation directly into templates, and /or the transcription of dictation. It also extends the reporting available on digital dictation across the whole letter production process.

EPRO ADMISSIONS MODULE allows the transfer of admission / discharge data from the PAS via HL7 messages. A patient's admission status is displayed integrated with other core features such as PowerSearch and lists by consultant / ward / specialty. Admissions data can be updated in Epro on a configurable basis. This also adds the capacity to view clinic appointments in calendar format, as clinic lists and also on a per-patient basis. Also, Epro provides a retrospective view on all previous admissions of the patient.

EPRO CLINICAL CORRESPONDENCE MODULE allows capture and production of clinical letters using templates in a web-based template engine or Microsoft Word and includes electronic review / approval and reporting on workflow.

EPRO DISCHARGE SUMMARY MODULE allows the capture and production of discharge summaries and also includes a discharge tracking module for management and reporting of discharge workflow. It includes a drugs module to support adding, managing and screening of drugs. The module also allows the recording of drug and medication histories. It includes the national CfH drug dictionary (D, M + D), a local formulary module and the possibility to create and manage order sentences on a per-trust basis. The included drug decision support adds decision support such as allergy checking, dose range checking, drug-drug interactions and drug doubling alerts.

EPRO ADVANCED PATIENT SECURITY MODULE adds extended security features to allow per patient, per specialty or per item security restrictions to be implemented in a sealed envelope model. It includes full audit and exception log management and reporting.

EPRO ALERT MODULE enables trusts to configure, add and display alerts that allow indications of specific problems or conditions affecting a patient such as "End of life", "Do not resuscitate" or "Sick patient". Ageing and automatic removal for each Alert is configurable on a per-trust basis.

EPRO BED MANAGEMENT AND WARD WHITEBOARD MODULE is a graphical view of ward based admission lists. It replaces traditional whiteboards, and is a powerful tool to support real-time bed state, bed

management, handover lists and discharge summaries. The Bed Management module provides visibility of current and immediate future bed occupancy across a hospital. It allows managing bed types, transferring patients to wards or beds, configuring bed layouts in a ward and the efficient monitoring and management of available beds. It is usually combined with handover lists using admissions, transfers and discharges.

EPRO ELECTRONIC DISTRIBUTION provides a unified letter distribution mechanism for trusts. It includes a capability for dual signature letters, the capability to restrict who authors or approves letters and extended letter cloning functionality. Default distribution routes and optional additional permitted routes for each recipient make correspondence workflows more efficient.

EPRO LAB RESULTS & INVESTIGATIONS permits capture, storage, retrieval and reporting on lab results, radiology data, photos, ECGs or graphs.

EPRO HANDOVER LIST MODULE allows the recording of key clinical information on patients, and the ability to organize patients on to lists, both pre-defined and custom user designed lists. Medical and Nursing handover is combined with specialist options for each, and the whole is integrated with a discharge planning element to aid in managing length of stay.

EPRO PERSONAL CORRESPONDENCE MODULE adds templating, review and approval functionality to the core module including integration with digital dictation. This is designed especially for non-patient and internal communication.

EPRO REPORTING DASHBOARD MODULE extends the range of reporting available in Epro to enterprise level. It comes with a range of pre-configured reports together with a customization package to tailor reports to local requirements and can be used to report on the data from any of the other modules.

EPRO TASKS MODULE permits capture, storage, retrieval and reporting of free text, or structured template form clinical notes, including general notes, referrals, OPCS coded procedures and telephone notes. It enables users to set up tasks with different priorities, allowing to filter by user, due date or state of completion. The tasks module also provides one click access to correspondence and individually tailored reporting on workflow on a per-user basis.

EPRO TEMPLATING MODULE provides users with the possibility to create and manage both print templates, which determine the final appearance, and underlying templates, which determine the appearance of the interface for letter creation. This allows individually designed letter edit on a per-trust, per-specialty or per-user basis.