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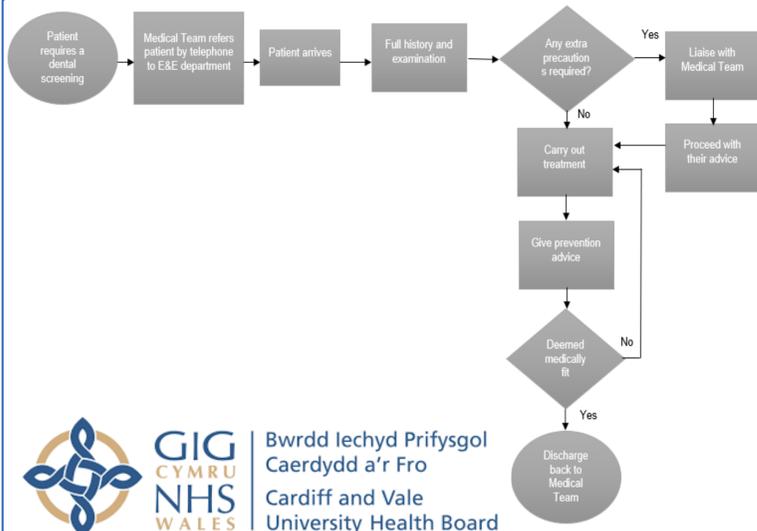
## INTRODUCTION

Medical specialties at University Hospital Wales refer patients to the Exam & Emergency (E&E) Dental Department for dental screening prior to medical intervention for example pre-bone marrow transplant or cardiac valve replacement surgery. A robust screening process, preventive advice and subsequent dental treatment should help work towards minimising complications to medical treatment due to pre-existing dental pathology. Preventative dental advice is crucial for these medically compromised patients due to their increased risk of complications i.e. infective endocarditis, sepsis, osteonecrosis. Currently challenges in providing high quality screening include a lack of consensus on appropriate treatment, high junior staff turnover and limited time between referral and the planned medical intervention.

## AIM

Aim: To improve the quality of dental screenings in order to maximise patients' dental episode as an opportunity to provide a good quality history, examination, and treatment plan, including preventative care.

## PROCESS MAP – PATIENT PATHWAY



## METHODS

Through retrospective assessment of patient records, we investigated the quality of pre-operative dental screenings in the E&E Dental Department against 14 domains. With a focus on preventative advice, dental charting and BPE domains. Feedback about the referral pathway and confidence in managing these medically complex patients was obtained from current departmental staff.

*'the referral form does not mention language line'*

*'the referral form is easy to use'*

*'prevention is sometimes missed because there is a lot to cover for a complex patient in a busy clinic'*

Figure 1 - Changes were made to the triage referral form for greater formality of the current pathway. Figure 2 - A new record keeping tool and an aide-memoire was implemented in Cycle 2 for clinicians to use during screenings. Improvements were planned by using the quality improvement 'Model of Improvement' methodology. Other QI tools used included process mapping, driver diagrams and model of sustainability.

**Figure 1**

Medical Team Referrals to Exam and Emergency

Date & Time (when call received)	
Patient Name	
DOB	
Hospital Number	
Hospital & Ward	
Person referring & bleep	
Speciality referring	
Reason in hospital, diagnosis?	
Referral reason	
Are they requesting a 'dental screening' or require patient 'dentally fit'?	Yes/No
If dental screening / 'dentally fit' request -	
- is surgery scheduled?	Yes/No Date:
- is chemotherapy/radiotherapy scheduled?	Yes/No Date:
- is bisphosphonate therapy scheduled?	Yes/No Date:
- any other intervention	
Is the patient	
- over 21 stone / 134 kilograms	Yes No Details
- allergic to anything?	
- on any pumps / drips/ monitoring?	
- on oxygen?	
- able to use the toilet themselves?	
- able to transfer from wheelchair to chair	
Is an escort required?	
Is an interpreter required?	
Inform ward of checklist	
- Written referral in hospital notes	Completed?
- Send hospital notes & drug charts with patient	
- Eat & take medicine as normal before appointment	
- Ensure patient has appropriate clothing and blanket provided	
Action	Completed?
- Appointment date & time ?	
- Book blue room (if necessary)	
- Arrange Language Line booking (if necessary)	
- Inform reception	
- Bleep porter	
Completed by _____	
Job Title _____	

New medical team referral form - with patient escort details, language line and blue room requirements

**Figure 2**

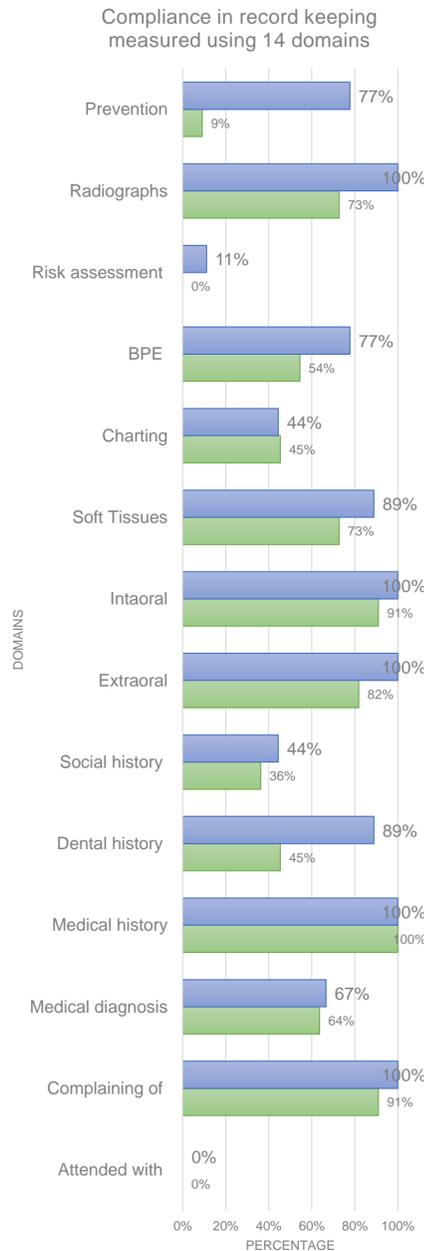
This document is to be inserted into clinical notes to supplement detailed written notes.

Addressograph

**Oral Hygiene Advice** - must be targeted to patients needs. Tick what has been provided.

All patients	Advise	Long Term Care	Advise
	Toothbrushing		Register with dentist
	Twice daily		Leaflet 'how to find a dentist'
	Targeted advice		Recall with own dentist
High caries risk	Prescribe	High periodontal risk	Recommend
	Colgate Duraphat 2800ppm		Corsodyl Mouthwash 0.2%
	Colgate Duraphat 5000ppm		Interdental aids
	Apply		
	Duraphat Varnish 22,600ppm		
Any other details			
_____			
_____			
Completed by _____			

Prevention proforma – easy format with tick boxes, divided into four sections



A chart representing data collection from cycle 1 (green) and cycle 2 (blue) against the 14 record keeping domains

## RESULTS

**Cycle 1** – data collection over a 3-month period, 11 referrals by medical specialities to E&E. Prevention was the main domain of focus and showed only 9% received prevention advice during dental screening. Other findings were; 54% had BPE, 45% had dental charting and 73% had radiographs / radiographic report.

**Cycle 2** – data collection over a 2-month period, 9 referrals for dental screening, following implementation of the prevention proforma (Figure 2), the prevention advice recorded improved significantly from 9% to 77%. Another notable improvement was BPE from 54% to 77%.

All domains, except dental charting, showed some improvement between cycle 1 and cycle 2. Dental charting is the only domain that decreased from 45% to 44% compliance.

## CONCLUSIONS

Improved resources and support for staff has enabled more comprehensive dental screening and ensured prevention is being delivered to high-risk patients.

Long term aim to improve record keeping, against all 14 domains. A proforma including all elements of record keeping is being designed.

## BIBLIOGRAPHY

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