Meeting NICE Inpatient Foot Guidance with no Additional Funding

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Both NICE in 2011: and Diabetes UK 'putting feet first' in 2012 recommended that patients with diabetes, on admission to hospital, have a foot check. The aim being to screen for pre-existing diabetes related foot pathology and ensure those with diabetes foot ulceration (DFU) are referred to an appropriate foot Multidisciplinary Team (MDT) in a timely manner. In addition it aimed to identify and reduce hospital acquired harm due to the increased risk of developing a hospital acquired pressure ulceration (HAPU) associated with an insensate foot.

Pennine Acute Hospitals Trust (part of the Northern Care Alliance) comprises of 1486 beds across 4 hospital sites. The Podiatry team of 6.8 wte manage predominantly active foot disease, in both inpatient and outpatient settings. There was no additional resource attached nationally or locally to these recommendations.

In 2012 we introduced a foot pathway; In 2017 NaDIA (National Diabetes inpatient Audit) and AQuA (Advancing Quality Alliance, who complete an ongoing audit of a percentage of inpatients with diabetes selected randomly against agreed parameters) concurred that 25% of DFU patients were not seen at all during their stay and the number of foot assessments performed only averaged 32%.

We estimated that with the percentage of inpatients having diabetes at any one time being 17% and the expected number of daily admissions from local data, there would be approximately 50 new patients with diabetes every day spread out across all wards on all sites making screening by the podiatry department not feasible.

Results

Diabetes foot assessments completed within 24 hours: Change was made in July 2020, pre change average 37% (range 33.6-43%) for the 12 months post change average = 91% (range 87-95%). Individual sites achieved 100% in some months.

AQuA target is set to 66%.

	July 17- July 2018 (Average Monthly)	July 18-July 2019(Average monthly)
Royal Oldham	36%	95.7%
Fairfield/Rochdale	33.3%	87%
North Manchester	43%	90%
Totals for PAHT	37%	91%

DFU referrals increased by 16% in the same period with 71% of the patients admitted with DFU as primary reason for admission being within referred 24hours, with 80% being seen by the MDT within 24hours. Of those not seen, 14% of the total referrals were received over the weekend.

DFU Primary reason:

	ROH	FGH/RI	NMGH	PAHT
Total	194	35	28	257
Referred < 24	141	21	19	181 70%
Referred > 24	53	14	9	76 30%
Assessment within 24 hrs	155	25	25	205 80%
Assessment > 24 hrs	39	10	3	52 20%
Referred weekend/ PH	24	7	2	33 13%

DFU comorbidity:

	ROH	FGH/RI	NMGH	PAHT
Total	116 37%	116 37%	83 26%	315
Referred < 24	67	66	50	183 58%
Referred > 24	49	50	33	132 42%
Assess < 24 hrs	95	82	69	246 78%
Assess > 24 hrs	21	34	14	69 22%
Referred weekend /PH	18	20	10	48 15%

Diabetes related foot HAPU were audited for a 3 month period immediately prior to the changes, and then again after 12 months of implementation. There was a total reduction in number from 56 to 24 which is a reduction of 57%.

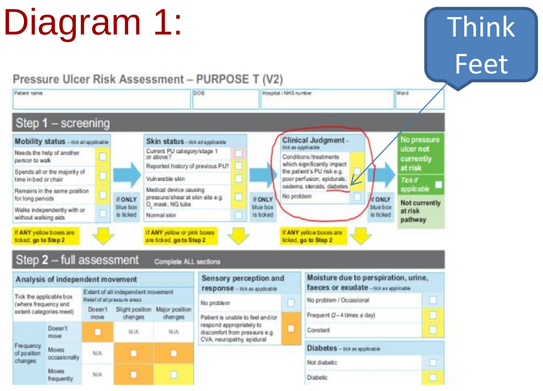
Method

As one part of our RCP QI project aimed at reducing harm for inpatients with diabetes, we identified a nursing document of an assessment received by all patients within 6 hours of admission; this included a full skin inspection and both vascular and neuropathic elements. Unfortunately with diabetes not being listed as a specific risk factor, and the assessment tool being electronic, this enabled the full assessment to be bypassed if the clinician wasn't aware of the additional risk factors associated with diabetes.

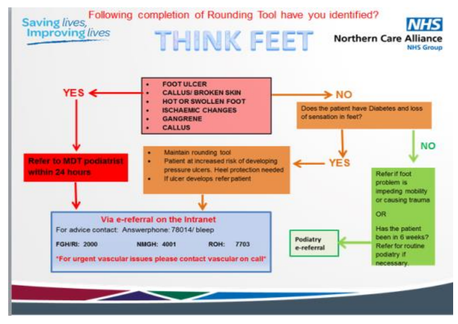
We discussed with our EPR (electronic patient record) leads possibilities of customizing this and including the pathway, customization was possible with the copyright holders permission by adding diabetes in the clinical judgement box (see diagram 1). A icon was added at this point and at the vascular assessment which when hovered over the pathway was visible. A direct link was also added at the bottom of the document to refer directly/electronically to podiatry, this populated the referral with the assessor only having to add minimal detail.

The document was passed through the trusts document control, and launched. Education was provided to nursing staff regarding the rationale for the change and appropriate completion of the document.

Diagram 1:



Pathway:



Discussion

The change to the tool avoided duplication of assessments for both clinicians and patients with the advantage of every patient being assessed not just those with diabetes resulting in fewer of the diabetes patients being missed due to selective practices.

The tool when coupled with appropriate education on a rolling program helps to highlight diabetes foot disease and the impact that this can have on the patient and there care including length of stay. Engagement and education of the staff in the rationale for this is essential and improved the visibility and accessibility of the foot MDT within the trust.

The increased number of referrals although overall was 16% on one site this was 21% bringing this very close to the increase we felt necessary if we were to identify all DFU, this is felt to further support the requirement for ongoing equitable education provision in the assessment technique and completion.

With the reduction in HAPU, we were also working in conjunction with a PUQI project and therefore can not attribute the total improvement to our changes, however we do feel that it has contributed.

There was also an incidental finding that 35% of the total patients referred with active foot ulceration did not have diabetes, the majority having vascular disease, this finding supports our local Vascular GIRFT recommendations to develop and provide similar services to those in place for the diabetes patients across acute and community services.

The number of patients not seen within 24 hours due to being admitted at the weekend highlights the need for weekend service provision.

Conclusion

The guidance can be achieved at scale and replicated across multiple hospital sites with minimal additional resource. Any additional resource can then be targeted at management of the DFU and continuous education regarding appropriate assessment/referral.

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