

# **Quality Improvement Project Submitted for FRCES Spring 2019**

## **Documenting Patient's Weight in the Emergency Department, to Improve Patient Safety.**

### **Executive summary**

This quality improvement project was undertaken within a Major Trauma Centre, to improve patient safety by recording the weight of adult patients prior to the administration of medication.

The changes implemented initially resulted in an increase in documented weight from 11.2% to 36.7% of patients receiving medication in the Emergency Department. The change implementation proved to be poorly sustained, however areas for further improvement were identified for the next phase of the QIP process.

**Word Count 3881 (excluding tables, figures, references and appendices)**

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## ABSTRACT

**Background:** Safety concerns were raised regarding the prescription of medications for adult patients in the Emergency Department, without documentation of their weight.

The setting was a regional Major Trauma Centre.

**Method:** Changes were implemented to promote the acquisition and subsequent documentation of an adult patient's weight, for whom medication was required. These were audited and adjustments made using the Plan-Do-Study-Act model for improvement.

**Results:** The changes implemented initially resulted in an increase in documented weight from 11.2% to 36.7% of patients receiving medication in the Emergency Department. The change implementation proved to be poorly sustained with figures returning to 12.6% at final audit.

**Conclusions:** Although the project has shown poor sustainability, areas for further improvement have been identified for the next stage of the QIP process.

## 1.0 INTRODUCTION

### 1.1 PROBLEM

Three Safety Learning Reports (SLRs) were received in the first half of 2018 all raising safety concerns regarding medications prescribed by dose per kilogram of body weight, yet with no documented patient weight in the notes. Although none of the patients came to harm these were viewed as near misses and recognised as having potential for significant harm if not addressed. These SLRs described the following incidents.

- A patient was sent from the Emergency Department to the ward with a N-acetyl cysteine infusion in progress. The prescription on the chart stated 150mg/kg as did the documentation on the drug bag, but the patient's weight had not been documented.
- A patient presented to the outpatient pharmacy from the Emergency Department to collect their low molecular weight heparin (LMWH). As part of the pharmacy checks they looked for the patients weight to ensure the prescribed dose was correct. No weight had been documented in the notes and on weighing the patient, the pharmacist identified an insufficient dose had been prescribed.
- A patient had been transferred to the ward with a prescription of insulin on a weight per kilogram body weight. The endocrinology team were concerned the patient had received incorrect insulin dosing as no weight had been documented.

Although only three safety reports were raised it is possible more incidents or 'near misses' occur than are formally reported. A further incident reported as a potential serious incident (SI) was subsequently reported later in 2018. This was related to an inadequate dose of LMWH for weight being prescribed for a morbidly obese patient. Clinical staff raised additional concerns regarding the requirement to prescribe urgent medication without knowing the patient weight or having the opportunity to look at the patient and estimate weight.

The critical underlying theme to this was that no weight had been documented. The electronic patient records software (EPIC) used within the trust enables staff to rapidly request a weight and then record the result. The system is then able to automatically calculate the drug dose required where the dose depends on weight. It also allows the weight to be recorded as actual, stated (by the patient) or estimated.

The lack of documented patient weights was discussed with the Department's lead pharmacist, who confirmed it was a major concern amongst all the trusts pharmacists. Adult patients are not currently weighed routinely on presentation to the department, and even when a weight is ordered there is often a delay in having the weight completed and documented in the patients notes.

### 1.2 KEY QUESTIONS

1. What is preventing timely documentation of a patient weight?
2. Can we weigh and record this for each patient attending the ED, and if so how?
3. How can this be achieved with a minimal impact on the workload of nursing staff?
4. If logistically difficult to weigh the patient i.e. bed bound or immediate emergency, can we safely estimate weight?

### 1.3 BACKGROUND

Discussion with other Emergency Medicine trainees via social media groups demonstrated considerable variation between departments in the UK. A very few weigh all patients on arrival, including non-ambulant patients via a trolley weigh, whereas many only weigh paediatric patients as is the case in this department.

In order to ascertain how many adult patients are currently weighed, or have a documented weight, a baseline audit was carried out in October 2018, including all adult patients who attended within a 24 hour period. This showed that of the 261 adult patients attending the Emergency Department, only 12 (4.6%) had their weight documented whilst in the department (Table 1). 107 patients had medications prescribed and administered whilst in the ED, of these only 12 patients had their weight documented (11.2%). All patients who had a documented weight received medication. It was noted during audit that five patients who presented with overdose were not weighed. It was felt that this was a significant omission as Toxbase recommends calculating the toxic dose by amount of toxin/kg of body weight.

**Table 1 – Results of Baseline Audit October 2018 during a 24-Hour Period**

Adult patients presenting to the ED in one 24-hour period.	Number of patients administered medication (% of total adult patients)	Adult patients weighed whilst in the ED, or had a documented weight (% of total adult patients)	Percentage of patients receiving medication with a documented weight
261	107 (40.9)	12 (4.6)	11.2

### 1.4 BRIEF LITERATURE REVIEW

A literature search showed that the question of estimating a patient's weight, both in the Emergency Department and in other settings has been raised previously, with concerns that hospital staff estimate weight poorly<sup>(1)(2)(3)</sup>. Coe et al<sup>(2)</sup> back in 1999 observed there was a significant variation between staff estimating a patient's weight and height in the operating theatre, suggesting that error could be as much as +/- 20%, and that staff tended to overestimate weights which could lead to harm. They cited the National Confidential Enquiry into Peri-operative Deaths (NCEPOD) that suggested failure to obtain and record weight and height might reflect poor care. It could also be said that when weights are not obtained and recorded prior to drug administration in the Emergency Department, or when drugs are delayed or there is a drug error due to not having a correct weight that this could be perceived as constituting poor care.

Menon et al<sup>(3)</sup> presented data that showed patients were most accurate at estimating their own weight with 91% (95% CI 90–93%) of patients accurate to within 10% of actual weight and 74% (95% CI 71–76%) to within 5% actual weight. Accuracy was lower for nurses, 78% (95% CI 75–80%) to within 10% actual weight and 44% (95% CI 41–47%) to within 5% of actual weight. Doctors were the poorest at estimating weight, estimates were within 10% of actual weight in 59% (95% CI 56–63%) of cases and to within 5% in only 33% of cases (95% CI 30–36%). The authors state that these findings were similar to those of other studies examining accuracy of weight estimation. They suggested that if weighing patients was not an option, asking the patient would be the next appropriate step with healthcare professionals estimating only as a last resort.

There is also some evidence in the literature that patients at extremes of body weight do poorly<sup>(4)(5)(6)</sup>, and although this research was not specific to patients in the Emergency Department, it is still an important consideration in the acutely unwell patient.

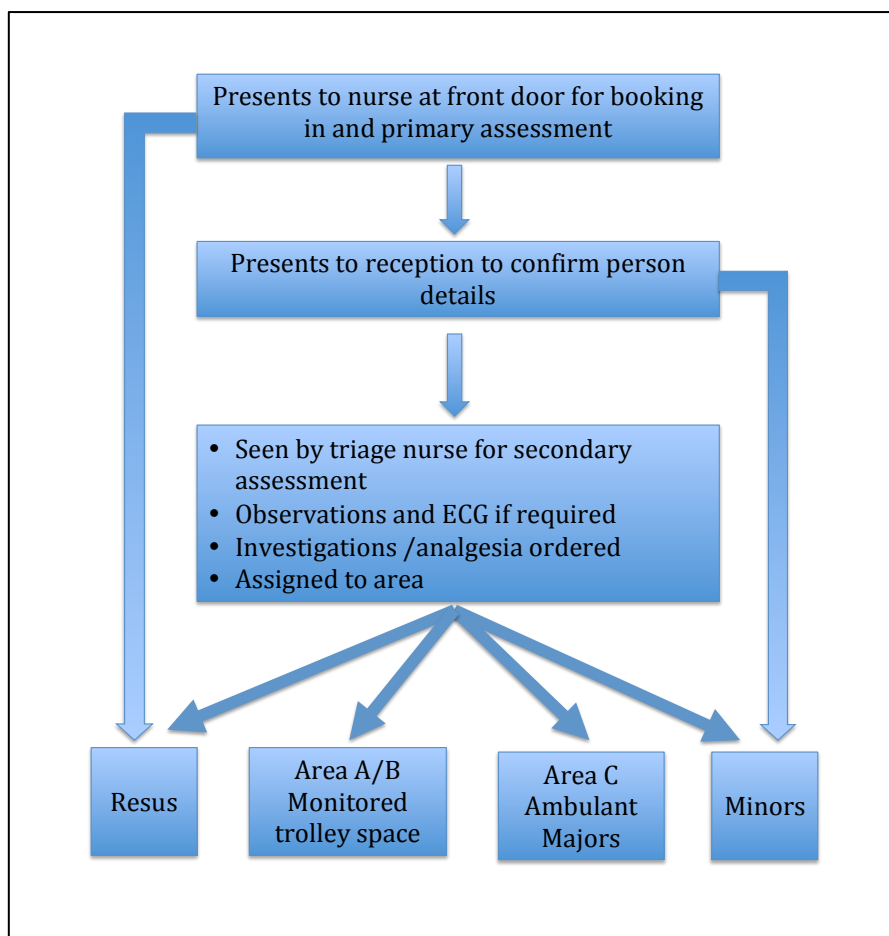
At time of writing there are no standards from the Royal College of Emergency Medicine (RCEM) to include weight as part of triage<sup>(7)(8)</sup>, and also no NICE guidance on weighing patients as part of initial assessment<sup>(9)</sup>, however if it would improve patient care, it should be our goal to weigh patients where possible. The RCEM standards do include an expectation for time to analgesia, time to antibiotics in sepsis and time to antidote in Paracetamol overdose. In these circumstances having a documented weight could be viewed as helpful in improving safety, providing we can find a way to resource the additional task or minimise the time it takes to complete this task.

## 1.5 SETTING

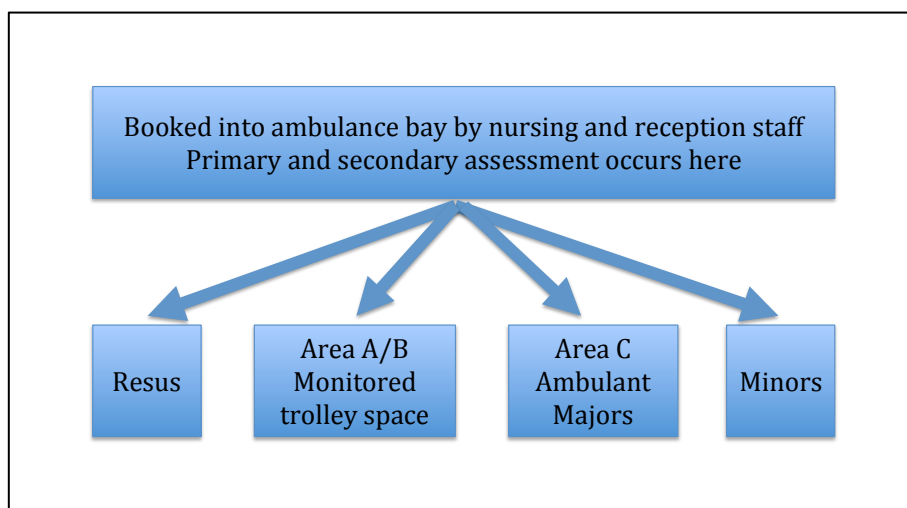
The setting was a tertiary teaching hospital and Major Trauma Centre in the East of England with an average of 350 patients presenting daily to the Emergency Department.

Current patient flow can be seen in figures 1 and 2 below.

**Fig.1 Patient Flow From Front Door**



**Fig. 2 Patient Flow From Ambulance Bay**



The patient group involved was adult patients, over the age of 16, who are prescribed medications in the department.

## 1.6 SPECIFIC AIM

To have a current weight recorded in the notes of all adult patients for whom medication is prescribed in the Emergency Department, in order to reduce the risk of drug error.

## 2.0 METHODS

### 2.1 STAKEHOLDER ENGAGEMENT

Discussion initially began via email and social media with the staff in the Emergency Department, asking for input on how weighing patients could be included into our Emergency Department observations. I suggested weighing all patients presenting during triage. Although many recognised this was an important measurement and could be seen as reducing risk several concerns were raised. These related to the time taken to weigh patients adding to the burden of the triage team at the front door, exacerbating the delays to triage and secondary assessment and causing a fall in performance with RCEM standards for triage.<sup>(7)</sup> Additionally concerns were raised regarding patient dignity if staff attempted to weigh patients 'in public' which was felt to be unacceptable.

Discussions were held with the senior nursing staff so I could better understand the patient flow through the department, and identify any issues raised by this stakeholder group. Summary of the discussion can be seen below in Table 2.

**Table 2 – Summary of Discussion with Band 6 & 7 Nursing Staff**

Issues Raised	Suggestions
<ul style="list-style-type: none"><li>- Additional work load for staff</li><li>- Patient dignity, patients cannot be weighed in public area.</li><li>- Lack of space for private weighing</li><li>- Insufficient scales</li><li>- Time spent looking for scales</li><li>- Increased wait for primary/secondary assessment</li></ul>	<ul style="list-style-type: none"><li>- Consideration of limiting workload by limiting weighing to those patients who required medication</li><li>- Discussion around use of space and the suggestion of a 3<sup>rd</sup> triage room</li><li>- Take scales to patient cubical</li><li>- Buy more scales</li><li>- Dedicated areas for scale storage in each area of department</li></ul>

Engagement with a representative group of healthcare assistants raised similar issues summarised in Table 3.

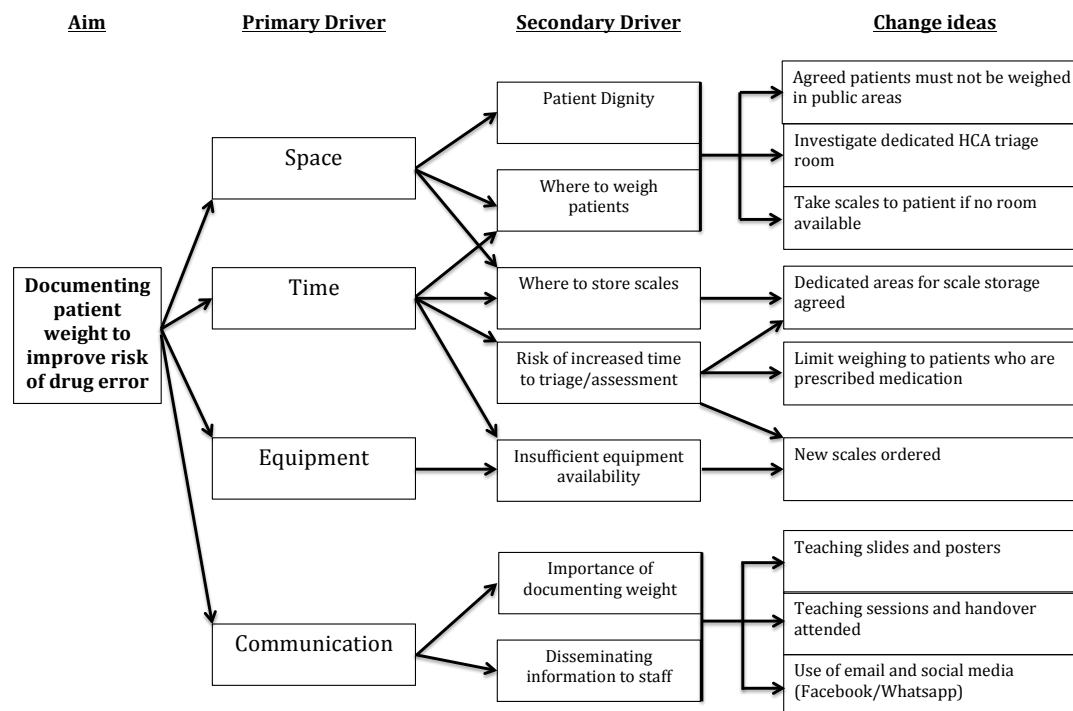
**Table 3 – Summary of Discussion with Healthcare Assistants**

Issues Raised	Suggestions
<ul style="list-style-type: none"> <li>- Space: there is not enough</li> <li>- Time: risk of increasing wait for assessment</li> </ul>	<ul style="list-style-type: none"> <li>- Allocate a dedicated room for HCA's to carry out observations including weight</li> <li>- Sufficient equipment in dedicated areas to reduce time taken</li> <li>- HCA's felt that if they had sufficient space and equipment, weighing patients would not impact triage time.</li> </ul>

Discussion was also held with both groups about the most appropriate locations for scales. After looking at patient flow through the department, it was discussed that ensuring scales were readily available would decrease time taken for weighing patients. Areas highlighted as important were the triage areas and assessment rooms at the walk in and ambulance entrances. It was also suggested that they be available in the minors, majors and resus areas. As a large department it was known that much time was wasted locating scales when they were required. It was suggested that patients should be weighed at secondary assessment in the event of being prescribed analgesia at this time, but could otherwise be weighed when assigned to an area. Four new sets of scales were ordered, two for standing patients and two seated scales. This was in addition to the five standing scales already in the department. Discussions with senior ED sister revealed the allocation of dedicated space for HCA triage was already in consultation, but this would take some time to be established.

The above discussions were summarised in a Driver diagram (fig 3)

**Fig 3 Driver diagram**



## 2.2 MEASURE OF SUCCESS

The measures required to assess the impact of the change were discussed and it was highlighted that with EPIC, the simplest measure was to request a weight as an order through the system. This could then be easily and quickly audited regularly to assess the level of change.

Doctors and independent practitioners (ENPs/ACPs/prescribing pharmacists/ nurses with PGD) were consulted and asked to order a weight on EPIC prior to prescribing medications. Doctors also raised the point that during peak times they would be happy to weigh their patients, however this was felt to be inappropriate use of resources by senior staff. It was suggested that staff administering medications should ensure a weight was documented, prior to medication administration, and that healthcare assistants could include patient weight as part of their routine clinical observations.

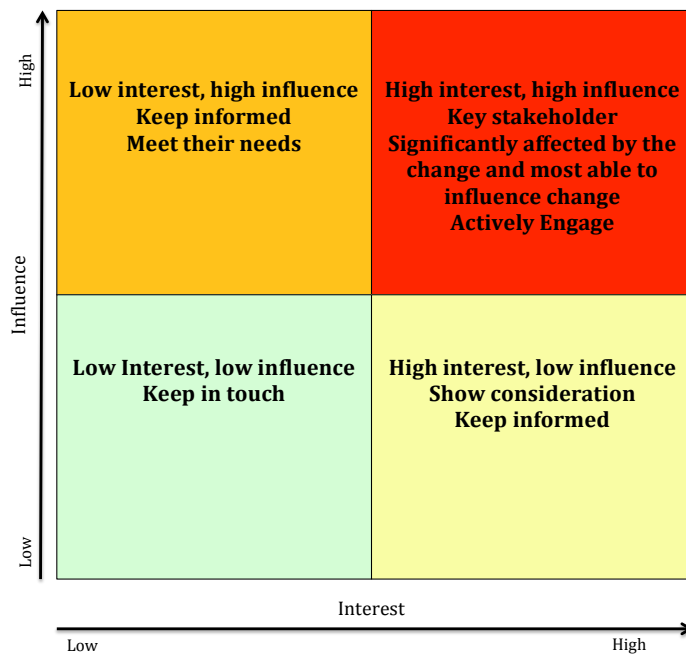
## 2.3 COMMUNICATION OF SUGGESTED CHANGE

The process to be implemented was presented in person where possible to groups of nursing staff at training days, and to the doctors at the departmental teaching day. Information was sent to all staff in the department via email and departmental Facebook page. Posters to remind staff were placed in strategic areas of the department. These information materials can be seen in appendix 9.4. The suggested change implementation was presented to the senior stakeholders for agreement. A flow chart overview of the whole project can be seen in appendix 9.1.

## 2.4 PDSA CYCLE 1

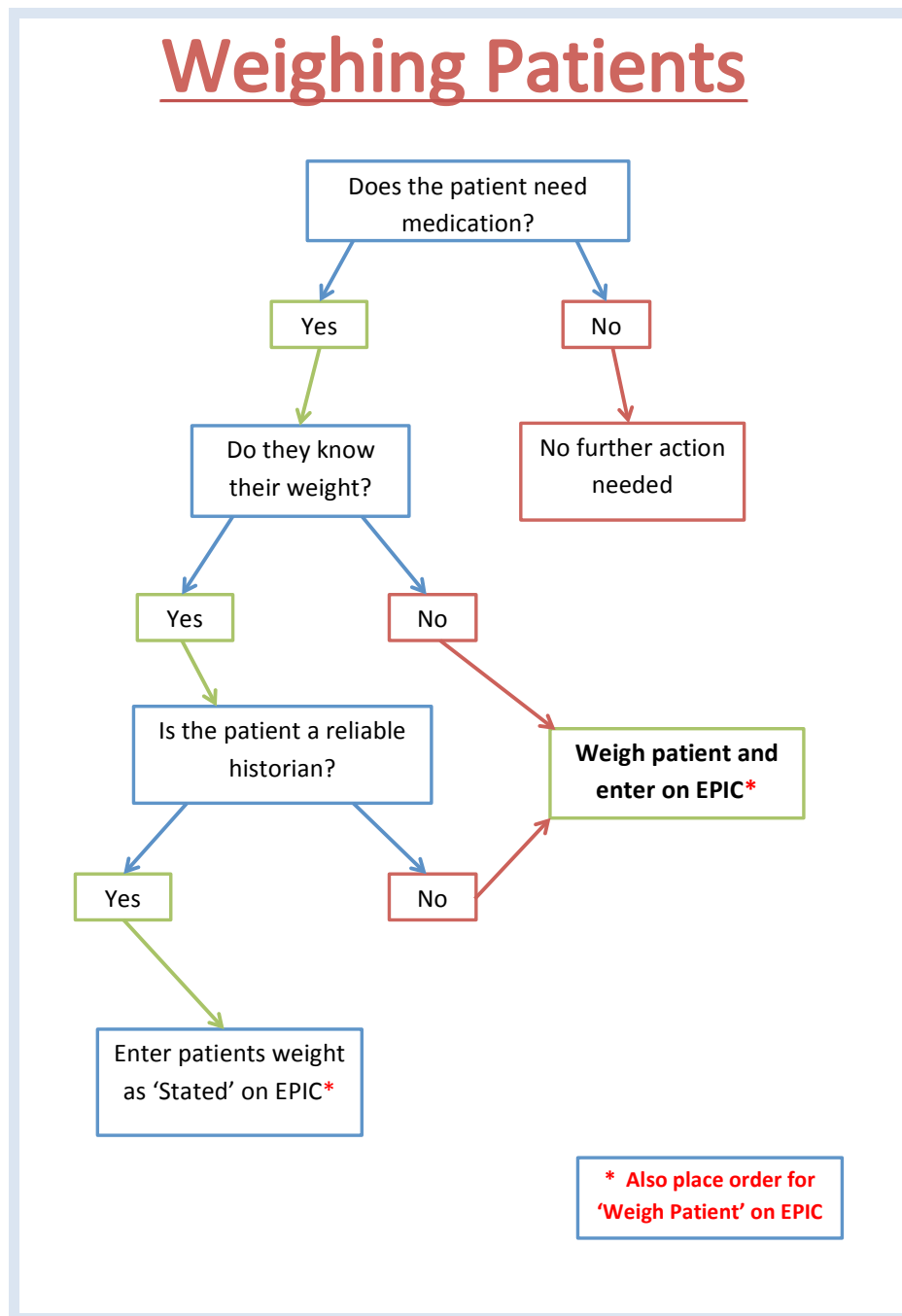
When the project went live both the nursing and doctors handover was attended by myself, or my representative, every morning for 7 days to ensure the change was implemented as planned and any concerns raised could be considered as part of the Plan-Do-Study-Act (PDSA) cycle. The change implementation initially appeared to be widely accepted, but once the project went live resistance developed. It is likely that many stakeholders did not realise the impact until implementation, or had not fully understood the process due to a lack of communication on my part. Concerns raised were mainly around the increased work possibly leading to delays in patient assessment and treatment, and the associated potential for additional risk. Additional work was completed to engage key stakeholders including the Deputy Clinical Director, Matron, Lead Consultant for front door and triage process, and Emergency Department Operations Team in order to find a mutually agreed process and overcome the concerns. These were identified as 'high interest, high influence' stakeholders, as demonstrated by the interest-influence grid (fig 4), who required further engagement.

**Fig 4 Interest-influence grid**



Safety aspects were discussed so the key stakeholder team all fully understood the potential risk to patient safety of not having a documented patient weight. Negotiations on how we could achieve this without prolonging triage time required compromise. It was decided that as the literature suggested that patients could often state their own weight with reasonable accuracy, this could be used instead of weighing all patients. Only patients who were unable to state their weight would need to be weighed. A flow chart was constructed (fig 5) and presented to key stakeholders for discussion. The question was also asked as to whether EPIC could automatically populate an order 'weigh patient' on all patients booked into the department, both to act as a prompt and also to save time requesting this. This approach is still being explored.

Fig 5 Flow Chart



## 2.5 PDSA CYCLE 2

Intervention 1: After several meetings and discussion the new flow chart was agreed by all key stakeholders and was put up in the triage rooms and the ambulance bay. This seemed to alleviate the concern of increasing triage times whilst still enabling a weight to be documented.

## 2.6 PDSA CYCLE 3

Intervention 2: The flow chart (fig 5) was emailed to all doctors and nursing staff, and was posted on the Emergency Department Facebook group as a reminder and to ensure it was being followed.

## 3.0 RESULTS

The initial audit identified only 11.2% of patients who received medication in the department had a documented weight (Table 1). A second audit of all adult patients presenting within a 24-hour period was carried out the day before the initial Go Live date. This was to see if the many discussions carried out in the preparation for the QIP had changed people's practices. Many nurses had fed back that they now understood the importance of weighing patients and had started to do so more often than before. A very slight increase in patients with a documented weight was seen (Table 4).

**Table 4 – Repeat Baseline Audit 07.30 11/02/19 – 07.30 12/02/19**

Adult patients presenting to the ED in one 24-hour period.	Number of patients administered medication (% of total adult patients)	Adult patients weighed whilst in the ED, or had a documented weight (% of total adult patients)	Percentage of patients receiving medication with a documented weight
314	134 (42.7)	17 (5.4)	12.6

To monitor the changes a more rapid audit was performed for each PDSA cycle. Unfortunately it was discovered that auditing EPIC on orders of 'weigh patient' was not as easy as previously hoped, and difficulties were found on programming the audit reports on this software. A search was carried out on EPIC for all adult patients attending the Emergency Department in a 24-hour period starting at nursing handover time (07.30). 30 patients were selected at random. This was done by dividing the total number of patients attending in a 24-hour period by 30, and counting down the list that number. If the patient did not fit criteria the next patient was selected. For example if 300 patients attended then every 10<sup>th</sup> patient was audited. The results can be seen below in table 5.

**Table 5 – PDSA Cycle Audits, Percentage of Patients Receiving Medication Who Had a Documented Weight**

Date	% who had documented weight
12/02/19 - 13/02/19	0
17/02/19 - 18/02/19	36.7
18/02/19 - 19/02/19	33.3
25/02/19 - 26/02/19	23.3

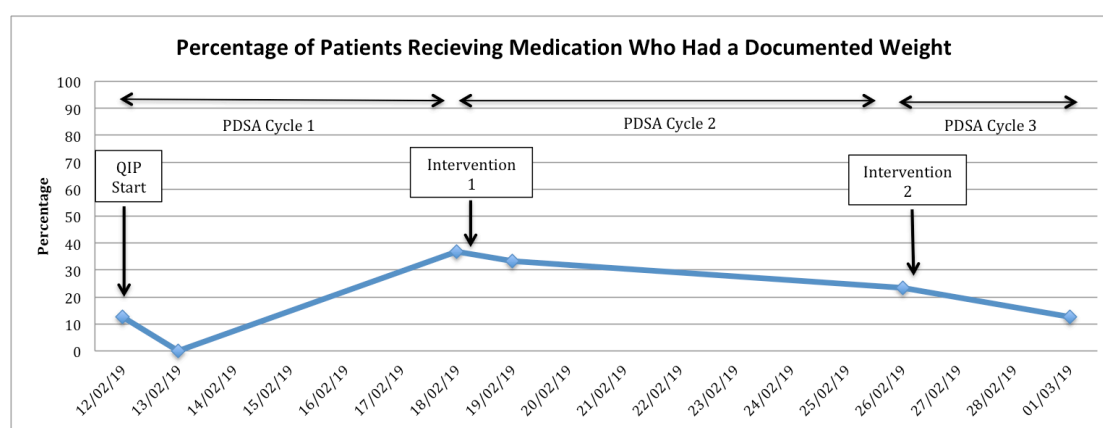
A further audit was then carried out including all patients presenting within a 24-hour period, to close the audit cycle, which can be seen in Table 6.

**Table 6 – Repeat Audit after Interventions**

Adult patients presenting to the ED in one 24-hour period.	Number of patients administered medication (% of total adult patients)	Adult patients weighed whilst in the ED, or had a documented weight (% of total adult patients)	Percentage of patients receiving medication with a documented weight
303	166 (54.8)	21 (6.9)	12.6

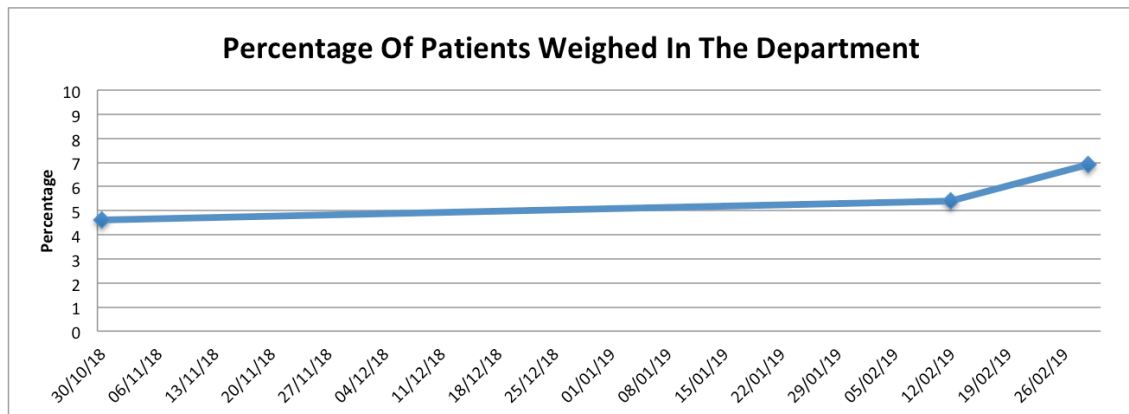
The results were extremely disappointing as demonstrated by the Run Chart below in Fig 6.

**Fig. 6 Run Chart Showing PDSA Cycles and Interventions**



The initial audit after the Go Live date demonstrated performance had declined. This may have been due to stakeholder resistance, which appeared to lead to general confusion about the process through out the department. The reason for this was communication error and was quickly rectified by arranging meetings, within 24 hours, with those involved. The issues were discussed and a solution agreed. This led to intervention 1, the flow chart as seen in fig 5. This was placed in the triage rooms and ambulance bays, and staff were made aware of the changes at handover each morning. The response to intervention 1 could still be improved, so the flow chart (Fig 5) was emailed out to all clinical staff and posted on the departments Facebook group, to ensure there was no confusion with the process. Final audit showed that neither of these two interventions had had any positive effect and the figures had in fact returned to baseline. The only improvement noted was that the overall percentage of patients weighed had increased (fig 7); although this change was so small it was of no significance.

**Fig 7 Percentage of Adult Patients who were Weighed in the Department**



## 4.0 DISCUSSION

The changes implemented initially showed good results with an increase in documented weights from 11.2% to 36.7% in patients receiving medication within the Emergency Department. However the results were not sustainable and the following audits yielded disappointing results. The interventions did not make any improvement indeed they appeared do the opposite, although this could just be the general downward trend back to baseline. Fig 6 shows that the general downward trend seemed to occur just after intervention 1. It should be noted that every morning before this I attended handover to attempt to engage staff with this project. As soon as this stopped there seemed to be a general deterioration back to baseline with no effect seen with the other interventions.

### 4.1 HIERARCHY OF INTERVENTION EFFECTIVENESS

The interventions used were mainly teaching and training. These, although generally regarded as safe, can be of limited effectiveness and take longer to implement change. Forcing functions may be more effective but also potentially more disruptive with greater risk.

## 5.0 LIMITATIONS

### 5.1 CHALLENGES

The implementation of change in a large centre with multiple key stakeholders, and a large number of staff, was particularly challenging. Problems with engaging people who are very short on non-clinical time and multiple senior staff, many with differing/opposing points of view, had to be overcome. Difficulties with how to implement change were also experienced, as currently there is no change management protocol, although this has been recognised by the consultant body and is in development.

## 5.2 SPACE

One of the major limitations within the department is space. The department has grown rapidly over the last few years in a building that was not initially designed to house a department of this size. Multiple refurbishments have resulted in a department footprint that is not conducive to the delivery of modern emergency medicine. At peak times lack of space is a significant problem that, although acknowledged by the trust, at present cannot be addressed. This coupled with the issue of maintaining patient dignity, by not weighing in a public area, was one limitation that could not be overcome at this time. Differing opinion over what defines public space and what is a breach of patient dignity also needs readdressing. One idea for future analysis was to engage in a patient survey to gain some insight into patient views.

## 5.3 TIME

The biggest concern was the impact of time taken to weigh on the triage and secondary assessment processes, and the associated potential for additional risk. Attempts to reduce this impact, by making scales readily available and by introduction of the flow chart for patients stating their weight, did not appear to be sufficient. Although the time taken to weigh the patient may only be 1 minute, if 300 adult patients present in a 24-hour period this equates to 5 hours spent weighing patients or 1 extra healthcare assistant per 24 hours. Further discussions with the lead consultant for the triage and secondary assessment process are planned.

## 5.4 CONFOUNDING FACTORS

Although the audits were taken over 24 hours to try to prevent variation over the course of the day, the measurement may have been affected by the day of the week or how busy the department was. Sample error may also have been a factor as the PDSA cycle audits were only small samples of the full data. To improve this in future the data should be collected weekly in the same 24-hour period and a full audit of all patients should be carried out.

## 5.5 PATIENT FACTOR

Although unlikely, there may have been patient refusal which has not been documented. A sign or leaflet explaining why the patient is being weighed may assist in this matter, and as previously mentioned a patient survey may be useful.

## 5.6 HUMAN FACTORS

Communication is a big factor in large departments. The issue of disseminating information to a large number of staff in a short time is a challenge. Email and other electronic forms of communication can be useful but there is no guarantee that people will read them. Staff motivation is another issue, when everyone is working at capacity, asking them to do 'just one more thing' can result in resistance. Review of the run chart highlighted the key to this seemed to be a reminder at every handover. Asking the senior nursing staff to include a few words about the importance of documenting an accurate weight at each handover may be a way forward, and this will be raised in future work. Adding a digital prompt via EPIC will be considered but agreeing changes to the EPIC software can take considerable time to implement.

## **5.7 EQUIPMENT FACTORS**

Plentiful and readily available equipment was highlighted as a factor from the beginning. Although more scales were purchased at the start of the project unfortunately during the project cycle three stand on scales and one chair style scales were mislaid. This also links in to the space factor in that there is simply not enough space to store this equipment in the most convenient area.

## **6.0 CONCLUSIONS**

This project yielded disappointing results with poor sustainability of the modest increase in documenting weight due to multiple factors. On reflection I had not fully understood the implications of the change until the project went live, and it appeared this was the same for several of the stakeholders. It is also clear that I had not fully explained and communicated the project as effectively as I had initially believed before the project went live. However it has been recognised now by key stakeholders that recording patient weight is an important issue for good practice and safe prescribing. It is hoped that with further work better results can be achieved. Suggested next steps would include a 'State the Weight' campaign to engage the patients as well as staff. Plans include signs and leaflets, explaining the importance of measuring weight, and surveys to get patient and clinical staff feedback. Anaesthetist colleagues who recognise the implications for better recording of weights in the fields of anaesthetics and surgery, to promote patient safety, have shown interest and wish to collaborate further to move forward. During this project I have learnt a lot about the quality improvement process and plan to continue with further work on this subject.

## **7.0 FUNDING**

Funding from the department was received for acquisition of weighing scales.

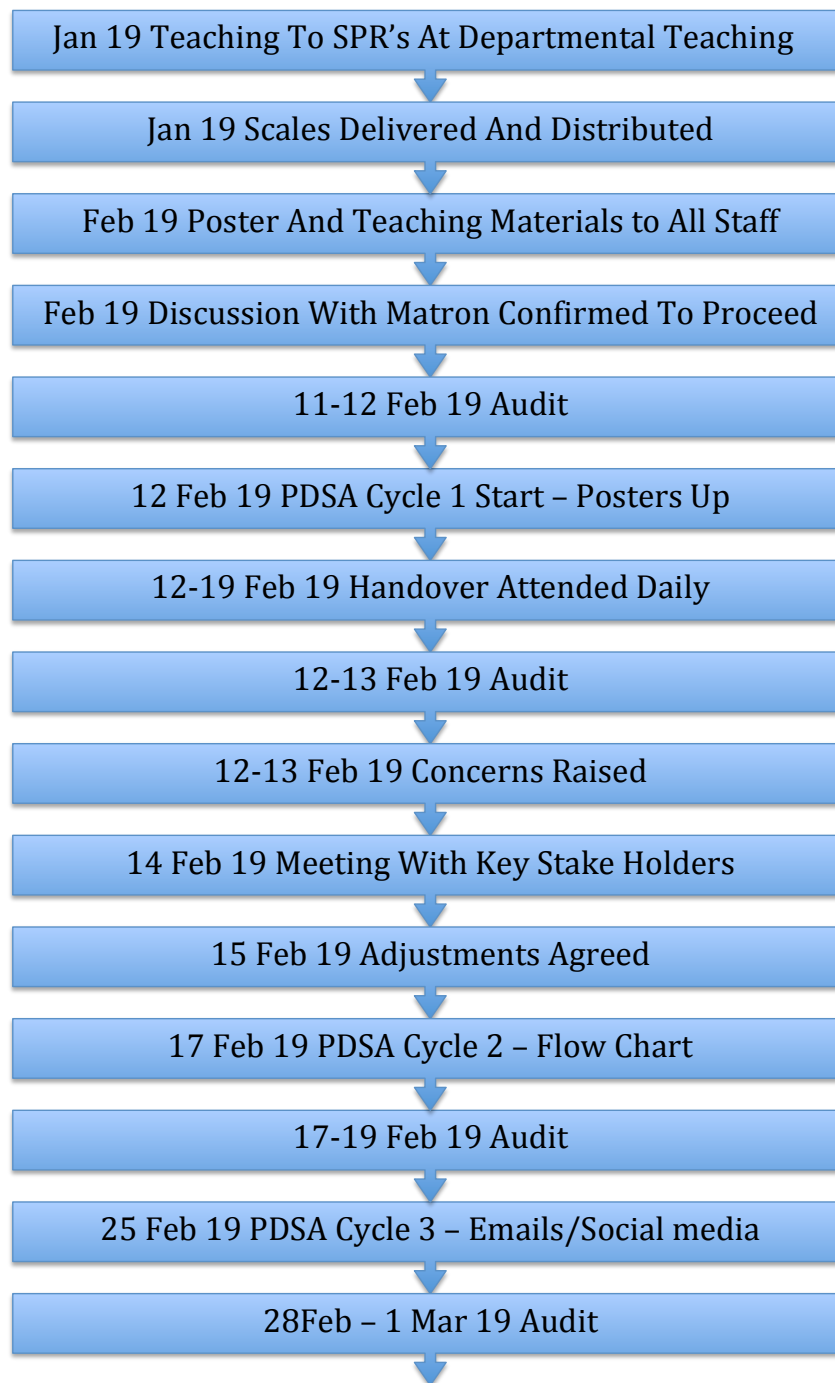
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## 9.0 APPENDICES

### 9.1 OVERVIEW OF PROJECT





## 9.2 SUMMARY OF INITIAL DISCUSSIONS

### Senior nurses

#### Issues raised

- Patients cannot be weighed in public
- Space issue
- More scales needed
- Where to put scales
- Concerns over increased time at triage – 15min standard

#### Suggested solutions

- Buy more scales
- Dedicated areas for scales to live
  - o Where they can be moved into patient cubical
    - Seated scales in ambulance bay – in between the two sliding doors
    - Stand on scales in dedicated place in each area
  - o Where they can be used in private
    - Stand on scales in the triage rooms and in the minors PA/triage room
- Turn smaller PA/triage room in Minors area into HCA room for Obs/ECG's/weights

### Junior doctors

- Are generally happy to weigh their own patients when calling them from the waiting room in minors or area C – as long as there are scales readily available.
- No specific issues raised except space and equipment availability

### HCA's

#### Issues raised

- Space – there is generally not enough space to carry out Obs/ECG/Weight in private area
- Time taken – this was generally not thought of as a problem as it only takes seconds in space and equipment is available.

#### Suggested solutions

- Have a dedicated area where HCA's can carry out Obs/ECG's/Weights in private
- Have sufficient equipment i.e. scales available, in a dedicated area where people know where to find them
- Discussion on where scales should be
  - o Stand on scales in both triage rooms
  - o Sit on scales in ambulance bay
  - o Stand on scales in each area.

**Pharmacists** – would make their job a lot easier and do more to prevent drug error

# Please Weigh Your Patients!

Any patient prescribed medication needs an up to date weight documented

## Why is this important?

- **Because - weight is an important measure of health**
  - Patients at extremes of weight do worse.
- **Because - weight related drug errors happen**
  - Having a correct weight documented will help minimise this risk.
- **Because - time critical management**
  - Having a documented weight can help reduce time to administration of drugs for sepsis, analgesia, overdose etc.
- **Because - obesity**
  - It's in the news everywhere. We should be supporting our patients in reducing their risk factors such as obesity
- **Because - Estimation just isn't good enough**
  - Estimation of weight varies greatly between staff and is often inaccurate

## How can I help?

Doctors/practitioners - Check for a documented weight, if not order a weight BEFORE you prescribe.

Nursing staff - Try to weigh your patients, either when doing observations or when a patient is moved to an area.  
Definitely weigh before giving Medications.

**Remember for patient dignity weighing must only be done in a private area**

## 2.4 TEACHING MATERIAL

<p style="text-align: center;"><b>Weighing patients in the Emergency Department</b></p> <p style="text-align: center;">Dr. Corinna Pascuzzi Supervisor Dr. Sue Robinson</p>	<p style="text-align: center;"><b>Why is it important?</b></p> <ul style="list-style-type: none"> <li>• <b>Because – Weight related drug errors happen</b> <ul style="list-style-type: none"> <li>– There have been at least 3 weight related drug errors this year and one significant event</li> <li>– Having a correct weight documented will help minimise this risk.</li> </ul> </li> <li>• <b>Because - Time critical management</b> <ul style="list-style-type: none"> <li>– Having a documented weight can help reduce time to administration of drugs for sepsis, analgesia, overdose etc.</li> <li>– The above examples are included in the RCEM standards for time critical management<sup>1</sup> but there are many more. LMWH, phenytoin, insulin etc</li> </ul> </li> </ul> <p style="text-align: right;"><small>1. RCEM Clinical Standards for Emergency Departments, Coll Emerg Med. 2014 (August) 1–16.</small></p>
<p style="text-align: center;"><b>Why is it important?</b></p> <ul style="list-style-type: none"> <li>• <b>Because - weight is an important measure of health</b> <ul style="list-style-type: none"> <li>– Patients at extremes of weight do worse.<sup>2</sup></li> </ul> </li> <li>• <b>Because – obesity</b> <ul style="list-style-type: none"> <li>– It's in the news everywhere. We should be supporting our patients in reducing their risk factors such as obesity</li> </ul> </li> <li>• <b>Because – Estimation just isn't good enough</b> <ul style="list-style-type: none"> <li>– Estimation of weight varies greatly between staff and is often inaccurate<sup>3,4</sup></li> </ul> </li> </ul> <p style="text-align: right;"><small>2. Cameron-Hartley K, Harris TR, Everett DF, Albanesi G, Messori M, Miles TR, et al. An overview of body weight of older persons, including the impact on mortality. J Clin Epidemiol. 2002;45(8):743–52. 3. Merson L, Kelly AM. How accurate is weight estimation in the emergency department? J Emerg Med Australas. 2003;13(2):123–6. 4. Cox TR, Holton M, Houghlin K, Jefferson G. The accuracy of visual estimation of weight and height in pre-operative obese patients. J Clin – 2009 – Alimentary – Wiley Online Library. 2009;150–16.</small></p>	<p style="text-align: center;"><b>Action Plan</b></p> <ul style="list-style-type: none"> <li>• <b>Which patients?</b> <ul style="list-style-type: none"> <li>– Ideally all patients should be weighed, but to start off we are just focusing on Adults for whom drugs are being prescribed.</li> </ul> </li> <li>• <b>How can I help?</b> <ul style="list-style-type: none"> <li>– <b>Doctors and Practitioners:</b> we are asking that you order a weight BEFORE you prescribe any drugs.</li> <li>– Look at the weight and prescribe drugs appropriately, don't just order dose/kg</li> <li>– Weigh your patient yourself, especially convenient when collecting a patient to go to minors or area C</li> <li>– <b>Nursing staff:</b> Try to include Patient weight as part of observations or when a patient is transferred to an area</li> <li>– Weigh patients before giving drugs</li> </ul> </li> </ul>
<p style="text-align: center;"><b>What's being done to help facilitate this?</b></p> <ul style="list-style-type: none"> <li>• More scales have been ordered and are being distributed around the department.</li> <li>• Consultation is under way for HCA room where observations can be carried out in private.</li> <li>• <b>Remember – Patient dignity!</b> <ul style="list-style-type: none"> <li>– Patients must be weighed in a private area as with any other clinical test</li> </ul> </li> </ul>	<p style="text-align: center;"><b>Scales</b></p> <ul style="list-style-type: none"> <li>• <b>Where can they be found and returned to?</b> <ul style="list-style-type: none"> <li>– 1 in each triage room</li> <li>– Minors – under nursing desk</li> <li>– Area A – under nursing desk</li> <li>– Area B – under computer desk</li> <li>– Area C – under nursing desk</li> <li>– Ambulance bay – 1 Sit on scales, 1 stand on</li> </ul> </li> <li>• <b>Remember take to your patient, do not weigh in public areas.</b></li> </ul>

## 9.5 EXAMPLE EMAILS

### 9.51 Email History



## 9.52 Examples of emails to operations team regarding ordering more scales

9.53 Examples of emails from ED Matron and senior practice development nurse discussing the triage/assessment process in regards to patient weight

9.54 Email from deputy clinical director raising concerns and demonstrating communication error.

9.55 Email to clinical director, deputy clinical director, Matron, and operations manager regarding the flow chart for intervention 1, with reply from operations manager.