

QUALITY IMPROVEMENT Supporting a hospital in difficulty: experience of a ‘buddying’ agreement to implement a new medical pathway

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ABSTRACT

Increased NHS regulation has identified many healthcare organisations with operational and/or financial difficulties. Although the causes are often complex, most cases are effectively managed internally with limited input from external agencies. How best to support the few organisations needing additional support has not been established. ‘Buddying’, in which senior clinical and managerial teams from a well performing organisation work with colleagues from an organisation in difficulty has been proposed as a potential solution. Previous reports suggest that these partnerships are generally valued by the organisation in difficulty but there is a paucity of measured operational benefit. In this article we present our experience of a ‘buddying agreement’ and its impact on the introduction of a new ‘whole system’ medical pathway (ie rotas, staffing, process) at an organisation in difficulty. We describe the process, problems, effect on operational performance, staff survey feedback six months post-implementation and the lessons learned.

Factors critical to success were good communication; clear responsibilities, common values and strong governance; incorporation into an effective local improvement programme;

targeting of specific issues; ability to influence people and foster relationships; adequate ‘manpower’ and gradual transition to local ‘ownership’.

KEYWORDS: Buddying, hospitals in difficulty, management of medical pathway, emergency access pathway

Introduction

In late 2014, National Health Service Improvement (NHSI; formerly Monitor) requested Guy’s and St Thomas’ Hospital NHS Foundation Trust (GSTT) to provide ‘buddying’ support at Medway NHS Foundation Trust (MFT) to rapidly improve safety and quality of care (QoC) and assist a recently appointed management team improve performance. MFT is a large district general hospital, serving a relatively deprived population on the Kent–London border.^{1,2} From 2011 until 2016, inspections by the Care Quality Commission (CQC), NHSI, and other external reviewers had consistently rated MFT as ‘inadequate’.³ The emergency access pathway (EAP) was found to be particularly problematic, characterised by excessive admissions, delayed discharges, poor continuity/QoC and inadequate handovers.^{1,2} The pathway was considered to result in unmanageable consultant caseloads, prolonged length of stay (LoS), excessive numbers of medical outliers despite adequate numbers of beds (>340), poor patient/staff experience and a high hospital standardised mortality ratio (HSMR; >120).

In March 2015, a buddying partnership was agreed for 18 months, subsequently extended to 28 months. In this article, we report the beneficial impact of two interventions (as part of a wider hospital improvement programme) on medical EAP performance at a trust in difficulty. Firstly, the value of a buddying arrangement, in which staff from GSTT (the supporting trust) provided advice, operational assistance, ‘compassionate’ leadership and pastoral support to colleagues at MFT (the host trust) during planning and implementation of a new medical pathway. Secondly, the effectiveness of a ‘whole system’ medical pathway transformation, in which ‘physical estate’ (ie ambulatory emergency care, acute admissions wards) and ‘medical processes’ (ie medical rotas, staffing, handovers, board rounds, specialist referral) were changed.

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Process and methods

The ‘buddying agreement’

The initial buddying agreement in March 2015 proposed nine work streams, but a repeat CQC inspection in August 2015 highlighted further deterioration, leading to a focus on patient safety through four core work streams including the medical EAP, professional nursing, clinical governance and leadership. The buddying agreement excluded responsibility for operational and financial performance, which remained with the MFT board. The emergency department (ED) was not included in the initial scope of the agreement as other arrangements were already in place.

GSTT appointed project managers and clinical leads with defined responsibilities and seconded nursing, medical and managerial staff to provide targeted input (eg leadership) and mentoring for MFT staff. In total, 113 GSTT staff contributed to the buddying programme, of whom 19 (including three contract managers) were involved in the medical pathway. The buddying team worked closely with MFT’s local improvement programme, operational teams,

NHSI and the emergency care improvement support team (ECIST). Progress was communicated to MFT’s board, external agencies (ie NHSI) and operational managers at regular team meetings.

Pathway redesign

In August 2015, following extensive consultation with senior MFT staff, a new medical pathway (Fig 1), consultant rotas and process change (Table 1) were proposed based on national recommendations^{4–6} and evidence reviews.^{7–10} The existing wards were reconfigured and an ambulatory emergency care (AEC) unit and two acute admissions wards (AAW; male and female) were created. The new pathway championed ambulatory rather than inpatient care, efficient ‘inpatient flow’ and high quality care by focussing resource in well-staffed areas (AEC/AAW) during the initial admission period when diagnosis, acuity and rate of disease progression are often unclear. Acute physician (AP) support enabled general internal medicine (GIM) consultants to deliver daytime ‘specialist’ services. Changes in operational

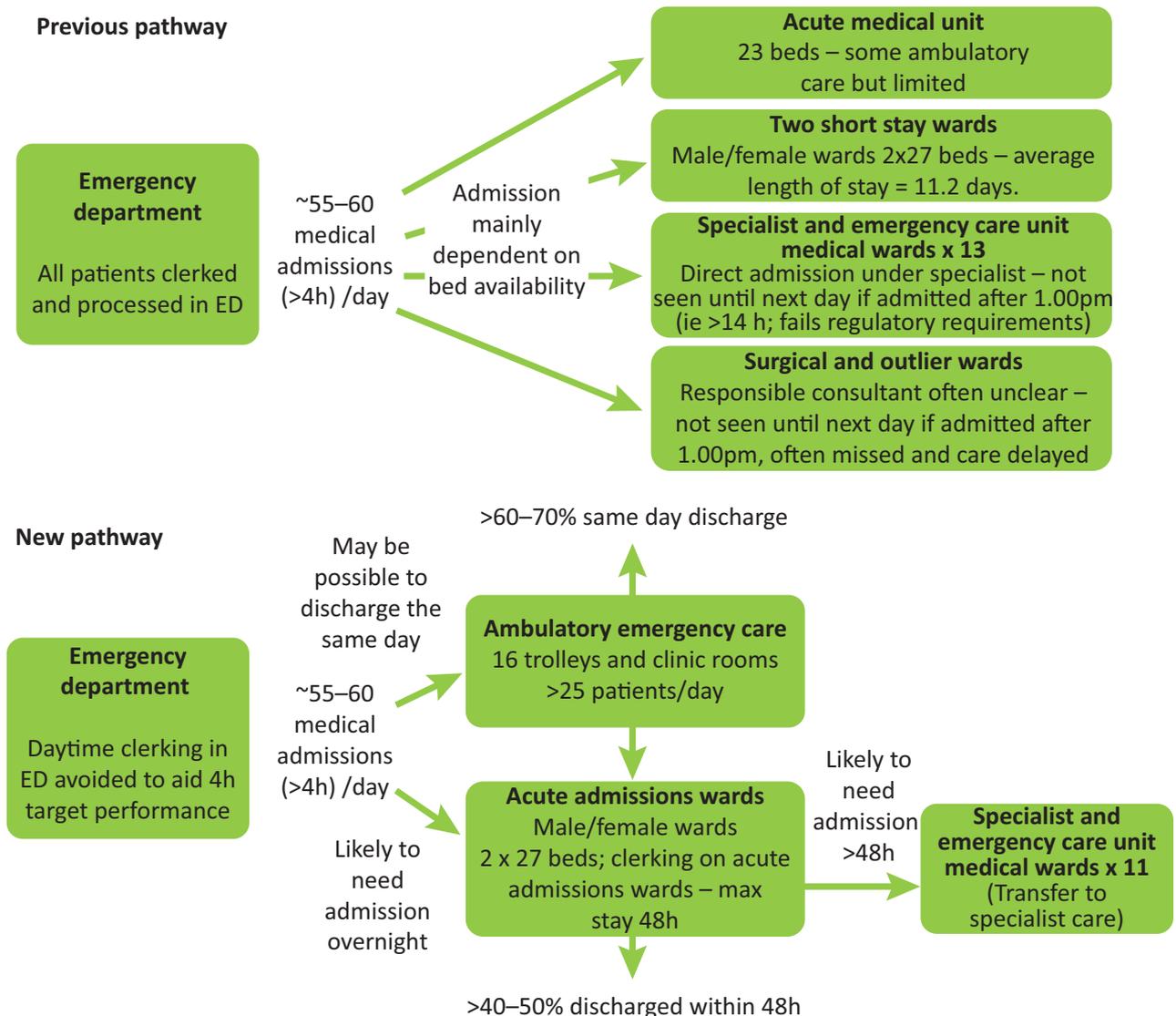


Fig 1. New medical pathway. ED = emergency department.

Table 1. Operational process and staff utilisation changes on the new medical pathway

Effective twice daily consultant handovers and patient allocation	Morning handover (8.00–9.00am) with patient allocations: daytime admissions cared for by the APs, overnight/twilight admissions managed by GIM consultant (see below), occasional specialty ward admissions managed by specialty ward consultants. Evening handovers (5.00pm) between the daytime AP and twilight/overnight GIM consultant addressed care of unwell patients admitted during the day, bed management, etc.
Ambulatory Emergency Care	Ambulatory care delivered by the APs in a new AEC unit enhanced patient flow and early discharge. Initially for 5, but rapidly 7 days a week, from 8.30am–8.00pm.
Board rounds 11.30am–12.30pm	Daily ‘standardised’ MDT board rounds, led by senior nursing staff with consultants in attendance, encouraged MDT working, rapid decision making and early discharge. Patient management was reviewed and actioned for all cases on AEC, AAW and specialty wards.
Improved consultant rotas	Effective consultant rotas ensured accountability (‘a named responsible consultant’), early patient review, continuity of care (physician of the week/weekend), sustainability, enhanced twilight consultant presence and efficient post overnight ‘take’ ward rounds.
Enhanced specialty referral process	Specialty referrals made at morning handover ensured early specialist input and best care. Same day review was mandated if a standardised referral form was completed by 10.00am. Patients remained under the admitting consultant until specialty ward transfer.
‘Frailty’ pathway	Ongoing development of a frailty pathway, with dedicated team, for patients >80 years old.
Clinical governance pathways	Introduction of a ‘deteriorating patient’ pathway and clinical governance process to improve patient safety, accountability and learning.
Clerking <i>pro forma</i>	Standardisation and simplification of the clerking <i>pro forma</i> .
Rapid follow-up facilities	Ongoing development of a ‘hot clinic’ and ‘procedure room’ on the AEC unit, to enhance ambulatory/discharge pathways as these facilities were not readily available elsewhere at MFT.
Daytime admissions 8.00am–5.00pm	Admitted and remained under the care of the AP (7 days a week) on AAW/AEC until discharge or transfer to a specialty ward. Continuous rolling ward round throughout the day ensured early review and, when appropriate, rapid discharge.
Twilight and overnight admissions 5.00pm–8.00am	Twenty four GIM physicians managed out-of-hours admissions, reviewing twilight cases between 5.00–8.30pm, then on-call for patients admitted overnight (8.30pm–8.00am) followed by a ‘post-take’ ward round the next morning. Patients remained under GIM consultant care whilst on AAWs.
Night handover: 9.00pm	Hospital at night handover managed by SNP. Less handover of unclerked patients.

AAW = acute admission ward; AEC = ambulatory emergency care unit; AP = acute physician; ED = emergency department; GIM = general internal medicine; MDT = multidisciplinary team; MFT = Medway NHS Foundation Trust; SNP = site nurse practitioner; SSW = short stay wards.

process and utilisation of staff across the EAP supported the pathway (Table 1).^{10,11} Often initial changes were not ‘perfect’ and needed repeated adjustments to achieve the desired result. These measures were supported by buddying clinical leadership and ‘deteriorating patient’ and clinical governance/patient safety programmes.

Data collection

New medical pathway inpatient performance data

Data for emergency medical admissions, total LoS, ‘zero’ LoS and >7 day admissions was analysed for 24 weeks before and after a 2 week implementation period to assess the impact of the new medical pathway. Surrogate quality data (eg readmission rates, HSMR, frailty team utilisation, ED corridor trolley waiting times, medical outlier numbers) were also analysed. There was some concern about the quality, accuracy and completeness of early data records because it was only possible to monitor the accuracy of data collection for 10 weeks before implementation of the new pathway. This was due to the need for rapid intervention in response to NHSI’s concerns about ongoing patient safety. To address this issue, binary analysis of the operational data collected for 10 weeks before and after the 2 week implementation period are also reported.

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For the new AEC, data was collected for 24 weeks after the two week implementation period.

Data presented include monthly numbers for:

- > direct general practitioner (GP) referrals seen and/or discharged the same day
- > patients ‘pulled’ from the ED and seen or discharged the same day
- > patients triaged to and reviewed on the 16 trolley beds or in the ‘hot’ clinic area following GP referral or when ‘pulled’ from ED
- > early patients follow-ups in AEC following discharge from ED or AAW (eg results review)
- > patients requiring basic day procedures (eg ascitic/pleural aspirations, blood/iron transfusions) to reduce inpatient bed usage.

Data analysis

Outcome data analysis included overall LoS for all emergency medical admissions, the number of ‘zero’ LoS admissions (ie discharged before midnight on the day of admission; a surrogate for admissions avoidance), discharges within 48 hours and >7 day LoS admissions. To assess the potential impact of early discharge, readmission rates for 7 and 28 days were also analysed.

Table 2. Operational performance before and after implementation of the new medical pathway using the 10 week data sets (mean±standard error)

	Before	After
ED medical admissions/week	297±7.4	310±5.4
LoS (days)	6.65±0.22	5.39±0.21
'Zero' LoS admissions/week	88.8±5.4	120.8±3.1
Discharges within 48 hours	80.3±3.4	80.8±3.2
Admitted for >7 days	96.1±2.6	90.2±2.8
Readmission rate (%)		
Within 7 days	6.41±0.2	6.41±0.3
Within 28 days	14.8±0.7	15.2±1.4
4 hour ED access target (%)	76.6±1.5	80.8±0.01

ED = emergency department; LoS = length of stay.

The NHS Institute for Innovation and Improvement recommends use of run or statistical process control (SPC) charts (Fig 2)¹² for measurement of improvement. Run charts identify that a change is likely to have occurred if seven or more consecutive points lie above or below the median following introduction of a new process. An SPC chart is a refinement of the run chart; variation is indicated by upper and lower process control limits and statistically relevant change by a run of seven points above or below the median. In this study, a programme was developed to generate SPC charts in Microsoft Excel 2013.

Results

The 24-week pre- and post-implementation data collection periods were similar in terms of admission numbers (307±7.5/week pre- and 312±4.4/week post-implementation), seasonality (ie admissions variability), acuity levels and holiday period effects. The age range of admitted patients was stable throughout with 38–43% of patients <65 years old, 27–30% 65–79 years old and 28–33% >80 years old. Table 2 summarises the operational

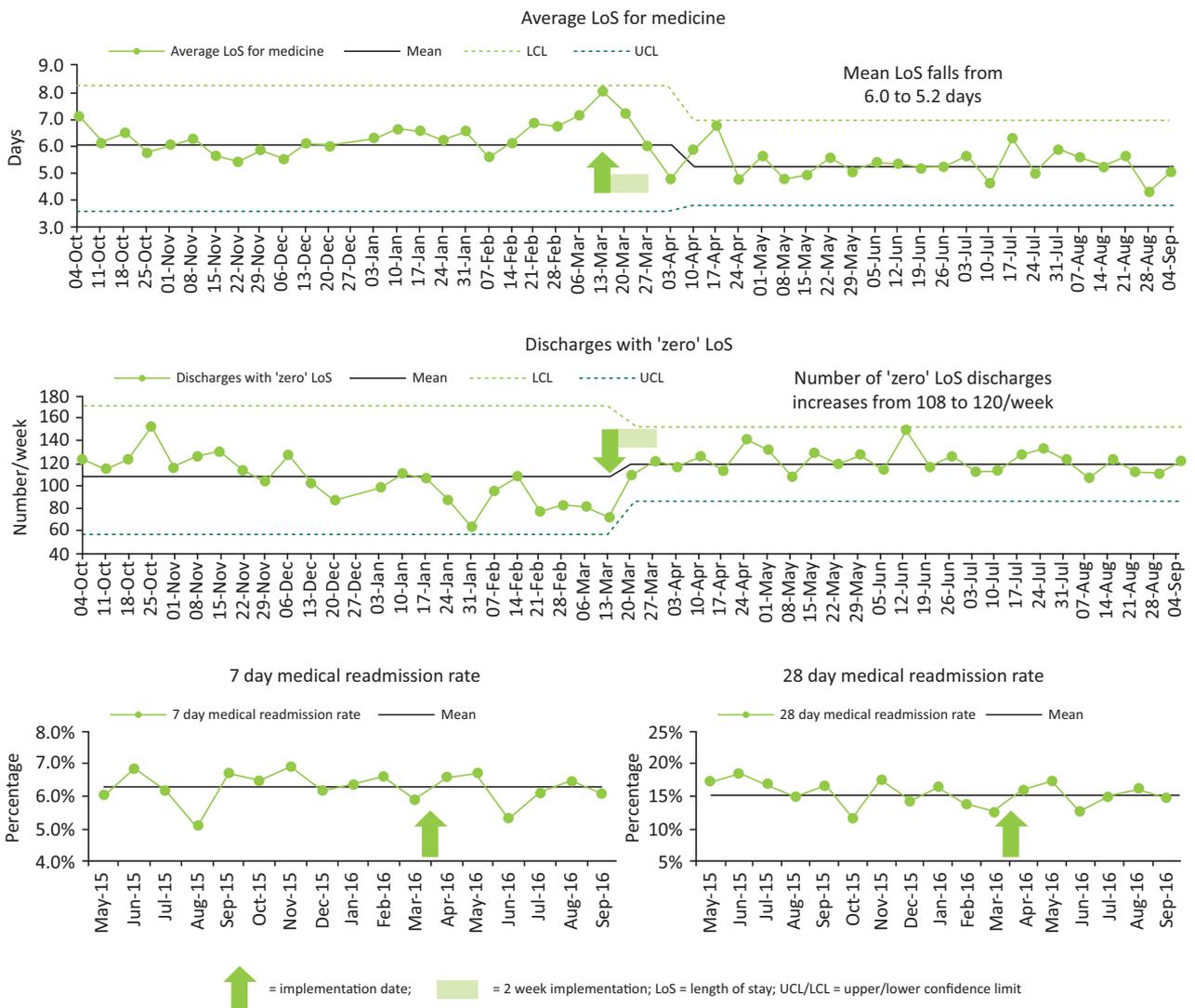


Fig 2. Statistical process control and run charts for average length of stay (LoS), discharges with 'zero' LoS and readmissions.¹²

Table 3. Ambulatory emergency care unit operational performance for the 6 months after implementation of the new pathway.

Month	16 trolley beds				Ambulatory emergency care (clinic rooms)					
	GP referrals		ED 'pulled'		GP referrals		ED 'pulled'		'Hot clinic'	
	Adm	Dis	Adm	Dis	Adm	Dis	Adm	Dis	Follow-up	Procedure
April	106	67	113	54	13	58	15	157	118	13
May	124	67	103	46	33	76	18	117	95	21
June	157	80	116	74	18	58	31	126	158	17
July	97	76	73	61	9	66	16	115	151	30
August	104	57	65	61	14	76	28	131	169	38
September	26	38	28	39	18	92	5	104	134	25
Mean	102.3	64.2	83	55.8	17.5	71	18.8	125	137.5	24
SE	17.7	6.2	14.0	5.1	3.4	5.3	3.9	7.5	11.3	3.7

ED = emergency department; GP = general practice; SE = standard error; Adm = admitted; Dis = discharged the same day.

performance of the pathway for 10 weeks before and after implementation.

SPC analysis of the 24-week pre- and post-implementation data demonstrated significant changes in baseline LoS from 6.0 days to 5.2 days and 'zero' LoS cases from 108.8/week to 120.2/week. The 7- and 28-day readmission rates were unchanged (Fig 2). Further operational data for the 24-week pre- and post-implementation period indicated that discharge numbers within 48 hours were unchanged at 81.9/week pre- and 82.2/week post-implementation but that patients admitted for over 7 days fell from 98.1/week to 86.5/week. Medical outliers (ie on surgical and escalation wards) decreased from 42 to 28/week although surgical outliers (~24 patients/week) were unchanged due to decommissioning of escalation beds. The 4-hour emergency access target performance was unchanged at 80.5% pre- and 80.0% post-implementation but there was inconsistent improvement to ~85–90% in the subsequent 18 months. ED 'trolley waits' (a surrogate for ED flow) decreased after pathway implementation with the number of patients waiting for >2 hours on trolleys falling from 263 to 221/week; >4 hours from 195 to 154/week and >6 hours from 134 to 107/week (data on trolley waits was only available for 10 weeks pre-implementation). The proportion of elderly patients meeting the criteria for review by the frailty team, who were subsequently seen, increased from an average of 51.6% before to 67.0% after model implementation (and to >80% in the last month of the 24 week post-implementation study period). HSMR fell from 106 in March 2016 to 101 in August 2016. The number of serious incidents was unchanged.

Table 3 presents AEC post-implementation operational data. During the first 6 months AEC saw 699 patients monthly (~33 patients/day) and 478 (23 patients/day) were same day discharges (68.9%). The AEC reviewed 255 GP referrals monthly (~12 patients/day) and 135 (~6 patients/day) were discharged the same day (54.7%). The monthly number of patients 'pulled and processed' from the ED was 283 (~13 patients/day) and 181 (~9 patients/day) were same day discharges (65.4%). A further 138 patients were seen each month (~7 patients/day) in the AEC 'hot clinic' as early clinic reviews following overnight ED attendances or recent AAW discharges requiring follow-up (eg review of investigations). A further 24.0 patients were seen monthly (~1–2/day) for 'day' procedures (eg ascitic aspirations).

Medical pathway staff survey

The new medical pathway required significant changes to staff working patterns and ratios, particularly on the AAW. An anonymous survey including 15 multi-choice questions (each with five options on a graded scale) and a section for comments was completed by staff in August 2016, six months after implementation. The survey assessed staff views of the value and impact of change on patient flow, safety and QoC, the effect on staff wellbeing (eg stress, workload), adequacy of communication, whether the effort had been worthwhile and if the buddying agreement had been beneficial.

Data collection

The survey was completed by 96 staff with experience of both the old and new medical pathways. It included 53 doctors (28 consultants, eight specialist registrars (SpRs), 17 junior doctors), 29 nurses (five matrons, 11 ward sisters, six staff nurses and seven clinical support workers), six managerial staff, two clinical support workers and six ward clerks. The questionnaire completion rate was >85% for senior staff (eligible consultants, matrons, ward sisters, managerial). Returns were lower in junior doctors (75%) and staff nurses (<50%) due to high staff turnover and use of agency staff as a result of vacancy rates >40%. Length of employment was <1 year in 32%, 1–5 years in 32% and >5 years in 36% of respondents. Most managerial staff and junior doctors (>90%) had been employed for <5 years whereas many consultants (57%) and nurses (76%) had been employed for >5 years.

Staff survey results

Staff responses are reported in Table 4 (for each question the percentage response to individual options for all 96 respondents is reported. In parenthesis the percentage of the 53 doctors, 29 nurses and when appropriate the 14 managerial and administrative staff is also reported to illustrate the impact on different staff groups). Most free text at the end of the questionnaire was complimentary (Table 5) focusing on improvements in hospital flow, QoC and safety, although there were a few negative comments. Constructive comments

Table 4. Staff survey undertaken 6 months after implementation of the new medical pathway

Question topic	Responses to multi-choice questions using a 5 option 'graded' scale. Specific options are indicated by inverted commas. The percentage of staff selecting specific options is reported for all respondents and differences between staff groups are in parenthesis.
The need for change	Before implementation of the new medical pathway, 73% of all staff (63% of doctors, 79% of nurses) had believed that either a 'major change' or a 'new medical pathway' was required.
Quality of care after change	After pathway implementation, 71% of all staff (76% of doctors, 62% of nurses, 83% of managers) believed QoC had improved either 'significantly' or 'moderately'. In contrast, 2% felt it was 'worse'.
Patient safety after change	After pathway implementation, 64% of all staff (64% of doctors, 55% of nurses, 100% of managers) reported that safety had improved either 'significantly' or 'moderately' and 3% felt it was 'worse'.
Value of the new AEC	64% of all staff (70% of doctors, 45% of nurses) felt that the new AEC unit was either a 'major' or 'transformational' improvement in the medical pathway. In addition, 84% of all staff (88% of doctors, 76% of nurses) believed 'the effort required (to implement AEC) had been worthwhile'.
Value of the new AAW	30% of all staff (34% of doctors, 24% of nurses) rated the new AAWs as either a 'major improvement' or 'transformational improvement' and 32% of staff (25% of doctors, 28% of nurses) a 'moderate improvement'. Overall, 79% of staff (93% of doctors, 49% of nurses) felt 'the effort required (to introduce the new AAWs) had been worthwhile'. Free text comments suggested that the AEC had been a more successful change than the AAWs initially. However, AAW subsequently improved with better continuity of care, doctor rotas and staffing levels.
Staff well-being and stress during the change process	29% of all staff (48% of nurses, 20% of doctors) reported that the changes required to introduce the new pathway had been either 'very stressful' or 'unbearable' and 29% as 'moderately stressful'. Most of these staff were based on the AAW. In contrast, 42% of all staff (49% of doctors, 31% of nurses) reported that the change process was 'not stressful' or 'mildly stressful'. Most of these staff were based on AEC. Nursing staff found the change more difficult with 48% of all nursing staff (55% ward sisters, 33% staff nurses, 57% CSWs) reporting the change as 'very stressful' or 'unbearable' compared to 20% of all doctors (18% consultants, 43% SpRs, 12% junior doctors).
Effect of changes on workload	32% of all staff (19% of doctors, 52% of nurses) reported workload had 'increased a lot', whereas 45% of all staff (51% of doctors, 41% of nurses) reported 'no change' or a 'reduction' in workload.
Communication before and during the implementation of the pathway	39% of all staff rated communication as either 'quite good' or 'good' and 34% as either 'quite poor' or 'poor'. Ward clerks, nurses and SpR/junior doctors were more likely to report either 'quite poor' or 'poor' communication. Managers, matrons and consultants tended to report 'quite good' or 'good' communication.
Involvement in planning before implementation	34% of all staff felt either 'inadequately' or 'not involved as much as preferred' and 49% reported they were involved 'to some extent' or 'a lot'. Managers and consultants felt most involved and ward sisters and CSW least involved.
The overall value of buddying support	43% of all staff reported that buddying was 'definitely beneficial' and 27% 'probably beneficial' whilst 5% of all staff reported 'probably not beneficial' and 7% 'definitely not beneficial'. 64% of doctors (and 92% consultants) rated buddying support as 'beneficial', whereas 35% of nurses (and 72% CSW) rated it as 'not beneficial'.

AAW = acute admission wards; AEC = ambulatory emergency care unit; CSW = clinical support workers; QoC = quality of care; SpR = specialist registrar.

Table 5. Examples of free text comments from the staff survey

Compliments	Hospital feels better; patient flow has improved; major benefit to staff and patients; patient feedback excellent; ambulatory unit working superbly; GSTT support good.
Process issues	Handover not working; frailty under pressure; needs work on AAW; difficult to close AEC in evening; issues with bed management out of hours.
Staffing issues	AAW nurse staffing inadequate (dangerously so at times); variability of junior doctor support on AAW; major issues identifying responsible junior doctor on AAW.
Workload	Massive increase in nursing workload in AAW; need more support on AAW.
Estate	AAW estate inadequate (computers, space, etc).
Communication	Needed more pre-planning and discussion with nursing staff.
Implementation	Chaotic start for junior doctors; needed better leadership from consultants.
Negative comments	GSTT is an aggressive trust with a conflict of interest...they would be happy to have Medway as a satellite unit!

AAW = acute admission wards; AEC = ambulatory emergency care unit; GSTT = Guys and St Thomas Trust.

suggesting areas for improvement were common (eg junior doctor rotas, continuity of care, etc). The main concerns related to staffing issues and handover arrangements between teams.

Discussion

In this case study we present our experience of a buddying agreement and the introduction of a new whole system medical EAP (both estate and process change), one of several work streams undertaken within the buddying framework. There were two aspects to the change process; firstly, buddying support to help teams undertake change and secondly, a new medical pathway to improve performance. Inevitably, these two interventions are closely interlinked and it is not possible to attribute outcomes to either independently. We highlight problems encountered and lessons learned for future buddying agreements.

Buddying was introduced in 2013 by the Department of Health to support NHS organisations in special measures.³ These partnering arrangements differ from other regulatory measures in that they embed a team of senior clinicians and managers from a well performing organisation into a struggling hospital. The aim was to promote close working partnerships, compassionate leadership and improve patient QoC, safety and efficiency. Equally important was the emotional and pastoral support for staff at the trust in difficulty which helped them enact change during periods of close scrutiny, perceived failure and low team morale. The despair and frustration that the MFT medical/managerial team experienced following previous failed interventions was a significant issue and a major impact of this buddying arrangement was to help the team try again.

Review has suggested that buddying arrangements are well received by most organisations,¹³ with clear opportunities for peer-based learning. Key factors recognised to contribute to the success of buddying agreements included clear terms of reference, specific time frames, targeting of acknowledged difficulties and incorporation into locally managed improvement programmes. A good fit in terms of organisational culture and values was more important than the size or geographical location of the organisations, although proximity aided management of the collaboration.^{3,13}

The findings of this study underline the importance of embedding change within a broad improvement programme. In this case, external agencies (such as ECIST) played a critical role in the programme not described elsewhere. It also reinforces the importance of personal relationships at board, programme and clinical levels,^{3,13} with the pre-existing relationship between the lead medical 'buddy' and senior MFT clinicians considered critical in promoting change, engaging consultants and providing pastoral support.

Importantly, the buddying organisation provided the human resource and time to support the change process.^{4,5,6} For the medical pathway work stream it was rapidly apparent that four core GSTT medical pathway buddies needed to be available for at least three days/week, with targeted input from 15 other clinicians for planning, training and clinical support. This is in excess of that usually provided in buddying arrangements, but does correlate with the concept that time to change is critical for quality improvement.

In contrast to previous buddying reviews,¹³ there was not universal staff acknowledgement of the need for change. Initially, >80% of the senior clinicians and nurses who took part in early

planning were sceptical about the potential benefits of the proposed changes but nevertheless were supportive and engaged in the process. In contrast, junior medical, nursing and clerical teams, who were less involved in planning and subsequently reported being poorly informed, were highly stressed by changes that were perceived to be imposed by an external regulator (NHSI). Failure to provide additional staff, especially clerical and nursing, during the early phase of implementation led to some describing the changes as 'unbearable'. This emphasises the importance of ensuring that staffing levels are adequate prior to change that may increase activity. A 6 week reduction in pre-implementation preparation time following a request from NHSI for early pathway implementation (in response to patient safety concerns), was partly responsible for the deficiencies in communication and planning.

Despite these issues, most staff (~80%) believed that the new pathway was 'worth' the stress involved and had improved patient safety and QoC. About 70% of staff (and 92% consultants) reported that the support of colleagues from GSTT was 'beneficial' but 12% (and >35% of nursing staff) reported that it was 'not helpful'. Over half of junior staff reported that communication and pre-implementation involvement in planning could have been improved.

Overall, the buddying programme and in particular the implementation of the new medical EAP was well received and both staff feedback and data analysis suggests that it was effective. However, many staff still found the process highly stressful. Factors that could have helped and learning points from our experience of the buddying arrangement are outlined in Box 1.

In addition to the buddying programme, this report prospectively assessed the impact of a rapidly implemented whole system medical pathway change, including new estate (ie AAW, AEC) and working practices, on EAP performance at a hospital in difficulty. Operational data in this study indicates that although admission numbers were unchanged there was a trend to earlier discharge with an increase in 'zero' LoS cases, and although there was

Box 1. Lessons learned during the buddying agreements

- Good communication, regular meetings and careful planning between the buddying partners and regulatory authorities at board, programme and local levels is vital.
- Ensure clear responsibilities, common values and strong governance within a defined framework.
- Incorporate the buddying plan into a strong local improvement programme.
- Identify and focus on specific issues (eg leadership etc).
- Use senior staff who are able to influence people and processes.
- Enable 'core buddies' to have a visible presence at least 3 days/week.
- Develop supportive relationships at regulatory and operational levels and foster compassionate leadership, management and mentorship.
- Engage local clinicians and teams with the goal of gradual transition to 'ownership'.

little change in <48 hour discharge numbers, this was supported by a reduction in >7 day LoS patients. This was an important pre-implementation objective and the improved patient flow may have contributed to reduced ED trolley waits. In addition, patient LoS was significantly reduced, admissions avoidance (AEC) enhanced, medical outliers reduced and bed utilisation improved. These changes improved patient flow and as a result two medical wards were closed and staff reallocated to other under-staffed areas. Most improvements have now been maintained for >18 months. The readmission rate was unchanged post pathway implementation, consistent with reports that reduced LoS is not associated with increased readmission.^{4,5} However, compared to the ~13% readmission rate for emergency (unplanned) admissions reported from 150 non-specialist hospitals in England in 2015–6, the MFT rate of ~15% indicates that further work is needed to address this.¹⁴

This study supports previous data reporting that optimising patient flow improves QoC, reduces cost and uses available capacity better.^{4–6,15–21} The EAP demand is surprisingly predictable with two-thirds of attendances arriving during normal working hours.^{14,15,17} Unfortunately, many patients are not seen by senior decision makers before they leave in the evening due to daytime processing delays. This can lead to inappropriate admissions and inefficient use of resource. Factors demonstrated to enhance EAP flow include AEC to promote admissions avoidance, AAWs/acute medical units to improve patient management and adjustments to process and consultant working patterns (eg employing decision makers at the ‘front door’ and during twilight shifts) that help align capacity with demand^{16–25}.

Previous reviews have suggested that buddying arrangements provide value for money in comparison to external consultancy fees for similar work.^{3,13} In this case, funding was provided from central funds (NHSI) and was independent of MFT. Nevertheless, cost is an important factor when comparing potential support options. In this project, the total cost for the 28-month medical pathway programme, independent of other buddying agreement costs (ie nursing, leadership), was £336,192 (£12,006/month or £144,082/year). Staff costs were £253,208 (£157,946 for 16 senior GSTT clinicians/managers who attended MFT on 210 days (1577 h), £95,262 for three contract managers for 173 days (1299 h) and £1639 for expenses). Overheads were £28,725 and the margin was £54,259.

In summary, we present the impact of the rapid introduction of a new medical pathway at a hospital experiencing major difficulties with its EAP, in the context of a successful buddying agreement. This study differs from previous buddying reports as it provides prospective data to demonstrate the benefits associated with a whole system medical pathway change and was assessed in a final staff survey by those involved in delivering the change. We demonstrate that significant improvement in performance, safety, QoC and patient/staff experience can be achieved at pace (<10 weeks) if supported by effective team working and appropriate external (eg buddying, ECIST) and regulatory input. Our experience suggests that buddying can be an effective way to promote change and support a trust in difficulty when included within a comprehensive improvement programme. In April 2016, a ‘mini’ MFT CQC inspection reported improvements in performance and patient safety. A full CQC inspection in November 2016, reported in March 2017 (a year post pathway implementation), rated medicine as ‘good’ with only the ‘responsiveness’ category needing improvement. Emergency care

was rated ‘needs improvement’ with ‘good’ for ‘effective, caring and well led’ categories. The overall CQC rating improved from ‘inadequate’ to ‘needs improvement’ and the trust was taken out of special measures in March 2017.³ In the 18 months since the buddying agreement concluded, the trust has continued to thrive. ■

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