

Emergency Department and Patient Flow Current Awareness Bulletin

February 2021

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Title: Collaboration in urgent and emergency care.

Citation: Care Quality Commission (CQC); 2021.

<https://www.cqc.org.uk/publications/themed-work/collaboration-urgent-emergency-care>

This report shares positive examples and lessons so that providers and systems working together against the continued pressures of the pandemic can build on what has worked well for others as they optimise their responses.

Journal Articles

Title: Staff strategies for dealing with care situations at an emergency department

Citation: Scandinavian Journal of Caring Sciences; Dec 2020; vol. 34 (no. 4); p. 1038

Author(s): Frank, Catharina; Elmqvist, Carina

Objective: Overcrowding is a common international problem at Emergency Departments often due to those patients get recommendations or referrals from other health professionals to seek care at the emergency department. Crowding brings with it an amount of adverse consequences for both patients and staff, and knowledge about staff's strategies of dealing with this caring situation is limited. The aim of the present study was thus to describe staffs' strategies to deal with the caring situations at an emergency department.

Method: Secondary analysis has been made of 18 qualitative interviews grounded in a lifeworld perspective. The interviews were analysed by qualitative content analysis.

Findings: The results showed that the staff at the ED worked in twofold directions using both proactive and reactive strategies in order to deal with the care situation when caring for patients at ED. The proactive strategy is optimising conditions, controlling patient flow and being boundary. The reactive strategy is about customising the conversation and holding an open approach.

Conclusion: In conclusion, the proactive strategy is to make what you decided for unseen circumstances. The reactive strategy is then about less anticipation of the encounter, waiting for the patient to act and react to it.

Implication: The result can have implications with respect to developing and improving care at crowded Emergency departments. Knowledge about strategies creates a fundament for developing visible sustainable structure for patient flow in making work patient safety for patients, staff and organisation.

Title: Emergency patient flow forecasting in the radiology department.

Citation: Health Informatics Journal; Dec 2020; vol. 26 (no. 4); p. 2362-2374

Author(s): Zhang ; Luo, Li; Zhang, Fengyi; Kong, Ruixiao; Yang, Jianchao; Feng, Yabing; Guo, Huili

Abstract: The accurate forecast of radiology emergency patient flow is of great importance to optimize appointment scheduling decisions. This study used a multi-model approach to forecast daily radiology emergency patient flow with consideration of different patient sources. We constructed six linear and nonlinear models by considering the lag effects and corresponding time factors. The autoregressive integrated moving average and least

absolute shrinkage and selection operator (Lasso) were selected from the category of linear models, whereas linear-and-radial support vector regression models, random forests and adaptive boosting were chosen from the category of nonlinear models. The models were applied to 4-year daily emergency visits data in the radiology department of West China Hospital in Chengdu, China. The mean absolute percentage error of six models ranged from 8.56 to 9.36 percent for emergency department patients, whereas it varied from 10.90 to 14.39 percent for ward patients. The best-performing model for total radiology visits was Lasso, which yielded a mean absolute percentage error of 7.06 percent. The arrival patterns of emergency department and total radiology emergency patient flows could be modeled by linear processes. By contrast, the nonlinear model performed best for ward patient flow. These findings will benefit hospital managers in managing efficient patient flow, thus improving service quality and increasing patient satisfaction.

Title: Rhythmicity of patient flow in an acute medical unit: relationship to hospital occupancy, seven-day working, and the effect of COVID-19.

Citation: QJM : monthly journal of the Association of Physicians; Jan 2021

Author(s): Dauncey, S J; Kelly, P A; Baykov, D; Skeldon, A C; Whyte, M B

Objective: The Acute Medical Unit (AMU) provides care for unscheduled hospital admissions. Seven-day Consultant presence and morning AMU discharges have been advocated to improve hospital bed management. This study aims to determine whether a later time of daily peak AMU occupancy correlates with measures of hospital stress; whether seven-day Consultant presence, for COVID-19, abolished weekly periodicity of discharges.

Design: Retrospective cohort analysis.

Methods: Anonymised AMU admission and discharge times were retrieved from the Profile Information Management System (PIMS), at a large, urban hospital from 14th April 2014-31st December 2018 and 20th March-2nd May 2020 (COVID-19 peak). Minute-by-minute admission and discharge times were combined to construct a running total of AMU bed occupancy. Fourier transforms were used to determine periodicity. We tested association between i) average AMU occupancy and ii) time of peak AMU occupancy, with measures of hospital stress (total medical bed occupancy and 'medical outliers' on non-medical wards).

Results: Daily, weekly and seasonal patterns of AMU bed occupancy were evident. Timing of AMU peak occupancy was unrelated to each measure of hospital stress: total medical inpatients (Spearman's rho, $r_s=0.04$, $P = 0.24$); number of medical outliers ($r_s=-0.06$, $P = 0.05$). During COVID-19, daily bed occupancy was similar, with continuation of greater Friday and Monday discharges than the weekend.

Conclusions: Timing of peak AMU occupancy did not alter with hospital stress. Efforts to increase morning AMU discharges are likely to have little effect on hospital performance. Seven-day Consultant presence did not abolish weekly periodicity of discharges - other factors influence weekend discharges.

Title: Improving patient flow in diagnostic imaging: a case report.

Citation: Journal of Medical Imaging & Radiation Sciences; Dec 2020; vol. 51 (no. 4); p. 678-688

Author(s): Jessome

Abstract: This case study focuses on Erie Shores Healthcare, a small Canadian hospital with a busy emergency department (ED) who acts as the sole provider of outpatient diagnostic imaging (DI) services to the community. The hospital is experiencing bottlenecks when balancing outpatient diagnostic procedures with inpatient and urgent ED requests in the X-Ray department, creating the need for increased overtime and missed breaks, as well as frustrations amongst patients, staff and physicians. To alleviate these issues and improve patient flow, this case study aims to identify options for increasing efficiency, improving adaptive workflow and decreasing wait times during peak hours in X-Ray. After a literature review, key components were narrowed down to include the following Lean Methods: floor plan evaluation with spaghetti diagrams, collection of benchmarking data from similar Canadian sites, and a real-time Client Flow Analysis. The potential benefits of Technologist Assistants (TA) and DI-dedicated porters are also explored. Lean methodology is an effective way to evaluate and improve patient flow in DI. Healthcare organizations should take advantage of key redevelopment projects and technological advancements to maximize their departmental efficiency.

Title: Delayed flow is a risk to patient safety: A mixed method analysis of emergency department patient flow.

Citation: International emergency nursing; Dec 2020; vol. 54 ; p. 100956

Author(s): Pryce, Alex; Unwin, Maria; Kinsman, Leigh; McCann, Damhnat

Objective: Increasing emergency department (ED) demand and crowding has heightened focus on the need for better understanding of patient flow. This study aimed to identify input, throughput and output factors contributing to ED patient flow bottlenecks and extended ED length of stay (EDLOS).

Method: Concurrent nested mixed method study based on retrospective analysis of attendance data, patient flow observational data and a focus group in an Australian regional ED.

Results: Analysis of 89 013 ED presentations identified increased EDLOS, particularly for patients requiring admission. Mapping of 382 patient journeys identified delays in time to triage assessment (0-39 mins) and extended waiting room stays (0-348 mins). High proportions of patients received care outside ED cubicles. Four qualitative themes emerged: coping under pressure, compromising care and safety, makeshift spaces, and makeshift roles.

Conclusion: Three key findings emerged: i) hidden waits such as extended triage-queuing occur during the input phase; ii) makeshift spaces are frequently used to assess and treat patients during times of crowding; and iii) access block has an adverse effect on output flow. Data suggests arrival numbers may not be a key predictor of EDLOS. This research contributes to our understanding of ED crowding and patient flow, informing service delivery and planning.

Title: The Impact of Advanced Practice Provider Staffing on Emergency Department Care: Productivity, Flow, Safety, and Experience.

Citation: Academic Emergency Medicine; Nov 2020; vol. 27 (no. 11); p. 1089-1099

Author(s): Pines ; Zocchi, Mark S.; Ritsema, Tamara; Polansky, Maura; Bedolla, John; Venkat, Arvind; Venkatesh, Arjun K.

Objectives: We examined emergency department (ED) advanced practice provider (APP) productivity and how APP staffing impacted ED productivity, safety, flow, and experience.

Methods: We used 2014 to 2018 data from a national emergency medicine group. The exposure was APP coverage: APP hours as a percentage of total clinician hours at the ED-day level. Multivariable regression was used to assess the relationship between APP coverage and productivity outcomes (patients/clinician hour, relative value units [RVUs]/clinician hour, RVUs/visit, and RVUs/salary-adjusted hour), flow outcomes (length of stay and left without treatment), safety (72-hour returns, incident reports), and experience (Press-Ganey scores), adjusting for patient and facility characteristics.

Results: In 13.02 million patient visits in 105,863 ED-days across 94 EDs from 2014 to 2018, nurse practitioners and physician assistants managed 5.4 and 18.6% of visits independently, 74.6% by emergency physicians alone, and 1.4% jointly. APP visits had lower RVUs/visit (2.8 vs. 3.7) and lower patients/hour (1.1 vs. 2.2) compared to physician visits. Higher APP coverage (by 10%) at the ED-day level was associated with lower patients/clinician hour by 0.12 (95% confidence interval [CI] = -0.15 to -0.10) and lower RVUs/clinician hour by 0.4 (95% CI = -0.5 to -0.3). There was no impact of increasing APP coverage on RVUs/salary-adjusted hour or RVUs/visit. There was also no effect of increasing APP coverage on flow, safety, or patient experience.

Conclusion: In this group, APPs treated less complex visits and half as many patients/hour compared to physicians. Higher APP coverage allowed physicians to treat higher-acuity cases. We found no economies of scale for APP coverage, suggesting that increasing APP staffing may not lower staffing costs. However, there were also no adverse observed effects of APP coverage on ED flow, clinical safety, or patient experience, suggesting little risk of increased APP coverage on clinical care delivery.

Title: User Experience of Mobile Personal Health Records for the Emergency Department: Mixed Methods Study.

Citation: JMIR mHealth and uHealth; Dec 2020; vol. 8 (no. 12); p. e24326

Author(s): Kim, Su Min; Kim, Taerim; Cha, Won Chul; Lee, Jae-Ho; Kwon, In Ho; Choi, Yuri; Kim, June-Sung

Background: Personal health records (PHRs) can be useful in the emergency department, as they provide patient information in an accurate and timely manner and enable it to be used actively. This has an effect on patients' health outcomes and patient experience. Despite the importance of PHRs in emergencies, there are only a few studies related to PHRs in emergencies that evaluate patient experience.

Objective: This study aims to introduce the novel mobile PHR (mPHR) platform to emergency environments and assess user experience.

Methods: The study was conducted from October 2019 to November 2019. In total, 1000 patients or carers in the emergency departments of 3 hospitals were provided an application-based service called FirstER, which was developed to collect and utilize medical information for patients in the emergency department. This study was performed as a mixed methods study. After using FirstER, we investigated its usability and conducted a survey on the experience of obtaining medical information with a legacy system and with FirstER. Additionally, we interviewed 24 patients to gain insight into their experiences regarding medical information using FirstER. For the quantitative analysis, the survey results were analyzed using descriptive statistics (mean and standard deviation). For the qualitative analysis, we determined the keywords and their frequencies from each survey question and interview question.

Results: In total, 1000 participants, consisting of both patients and carers, were recruited in this study. Their mean age was 41.4 (SD 13.3) years. We ascertained participants' satisfaction with FirstER and their mPHR needs through a survey and an in-depth interview. With the current system, participants were not well aware of their health conditions and

medical information, and they were passive in the use of their medical information and treatment. However, they wanted their medical information for several reasons, such as information sharing and managing their health conditions. FirstER provided participants with their needed information and an easy way to access it. The mean System Usability Scale (SUS) value was 67.1 (SD 13.8), which was considered very near to acceptable.

Conclusions: This study is the first to implement mPHRs in the emergency department of large tertiary hospitals in the Republic of Korea. FirstER was found to enhance user experience in emergencies, as it provided necessary medical information and proper user experience. Moreover, the average SUS was 67.1, which means that participants found FirstER to be very near to acceptable. This is very encouraging in that FirstER was developed within a very short time, and it was a pilot study.

Title: Emergency general surgery 'Hot Clinic': Efficiency, prevention of hospital admissions and factors influencing patient experience.

Citation: The surgeon : journal of the Royal Colleges of Surgeons of Edinburgh and Ireland; Dec 2020; vol. 18 (no. 6); p. e39

Author(s): Patel, Nandesh; Ravindran, Rajan; Paterson-Brown, Simon

Objective: The constant pressure facing hospitals to reduce emergency inpatient admissions has led towards more consultant-led 'Hot Clinics' (HC). The patient experience in these settings remains poorly understood. This study evaluates the efficiency and ability of the HC to prevent unnecessary emergency surgical admissions and factors influencing the patient experience.

Methods: Patients were referred to the HC from the Emergency Department, General Practice or Out-of-Hours service over the initial six-week period. A questionnaire collected the reason for referral, management without a HC, final diagnosis and management. Appropriateness of referrals were evaluated by the HC consultant and retrospectively by a blinded consultant. A second questionnaire collected information on patient satisfaction in a subsequent study period.

Results: 119/126 referrals (94%) were judged appropriate in the HC analysis with 97/126 (77%) considered appropriate in the retrospective analysis. The HC reduced the amount of potential emergency surgical admissions from 114 to 14 ($p < 0.001$). In the second period, 114/121 patients (94%) rated the HC as very good or good; with privacy ($p < 0.05$) and decision-making ($p < 0.001$) linked to patient satisfaction. Comfort ($p < 0.05$) and decision-making ($p < 0.001$) were linked to patients recommending the service. 103 patients (85%) would be extremely, or very likely to recommend the HC service with 93 patients (77%) preferring HC treatment over a hospital admission.

Conclusions: Most referrals to the HC were appropriate and it continues to prevent unnecessary emergency surgical admissions. The HC service is valued by NHS patients, who prefer HC treatment over admission. Various factors to improve the patient experience in HC have been identified.

Title: Effect of hospital interventions to improve patient flow on emergency department clinical quality indicators.

Citation: Emergency medicine journal : EMJ; Dec 2020; vol. 37 (no. 12); p. 787-792

Author(s): Sethi, Simon; Boulind, Caroline; Reeve, Julie; Carney, Amanda; Buijns, Stevan

Introduction: The Royal College of Emergency Medicine highlights poor flow through hospitals as a major challenge to improving emergency department flow. We describe the effect of several hospital-wide flow interventions on Yeovil District Hospital's emergency department flow.

Methods: During 2016, a design science research study addressed several areas disproportionately contributing to exit block within Yeovil District Hospital. In this follow-up study, we used a retrospective, before/after design, to describe the effect of these interventions on the ED. We used the Royal College of Emergency Medicine's clinical quality indicators (4-hour standard, time to decision-maker, 7-day unplanned reattendance, left without being seen, ambulatory patient care and patient experience). Pearson correlation coefficient (r) was used to compare variables. Wilcoxon signed-rank test was used to compare performance before and after the intervention.

Results: Yeovil District Hospital emergency department was attended by 160 373 patients between August 2015 and October 2018. Mean monthly attendance was 4112 (± 342) patients, mean age was 43 (± 28) years with equal male/female split (49/51%). The 4-hour standard made a recovery from 92% to 97% ($p=0.01$) that did not correlate with a recovery in national data ($r=0.09$); this despite rising attendances both at Yeovil and nationally ($r=0.75$). All clinical quality indicators improved significantly (except unplanned reattendance and patient feedback which improved but not significantly).

Discussion: The positive effect on emergency department clinical quality indicators reveals the beneficial impact of improving in-patient flow. Qualitative research is needed to better understand facilitators and barriers to flow improvement work.

Title: Patient flow data registration: A key barrier to the data-driven and proactive management of an emergency department.

Citation: International Emergency Nursing; Nov 2020; vol. 53

Author(s): Martin ; Bergs, Jochen

Title: Effect of hospital interventions to improve patient flow on emergency department clinical quality indicators.

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Title: Waiting times in emergency departments: exploring the factors associated with longer patient waits for emergency care in England using routinely collected daily data.

Citation: Emergency medicine journal : EMJ; Dec 2020; vol. 37 (no. 12); p. 781-786

Author(s): Paling, Steven; Lambert, Jennifer; Clouting, Jasper; González-Esquerré, Júlía; Auterson, Toby

Objective: Long lengths of stay (also called waiting times) in emergency departments (EDs) are associated with higher patient mortality and worse outcomes. This study aims to add to the literature using high-frequency data from a large number of hospitals to analyse factors associated with long waiting times, including exploring non-linearities for 'tipping points'.

Methods: Multivariate ordinary least squares regressions with fixed effects were used to analyse factors associated with the proportion of patients in EDs in England waiting more than 4 hours to be seen, treated and admitted or discharged. Daily situation reports (Sitrep), hospital episode statistics and electronic staffing records data over 90 days between December 2016 and February 2017 were used for all 138 English NHS healthcare providers with a major ED.

Results: Higher inpatient bed occupancy was correlated with longer ED waiting times, with a non-linear association. In a full hospital, with 100% bed occupancy, the proportion of patients who remained in the ED for more than 4 hours was 9 percentage points higher (95% CI 7.5% to 11.1%) than with an 85% occupancy level. For each percentage point change in the following factors, the proportion of ED stays over 4 hours also increased: more inpatients with hospital length of stay over 21 days (0.07%, 95% CI 0.008% to 0.13%); higher emergency admissions (0.08%, 95% CI 0.06% to 0.10%); and lower discharges relative to admissions on the same day (0.04%, 95% CI 0.02% to 0.06%), the following day (0.05%, 95% CI 0.03% to 0.06%) and at 2 days (0.05%, 95% CI 0.04% to 0.07%).

Conclusions: These results suggest that tackling patient flow and capacity in the wider hospital, particularly very high bed occupancy levels and patient discharge, is important to reduce ED waiting times and improve patient outcomes.

Title: Responding to the COVID-19 Pandemic: A New Surgical Patient Flow Utilizing the Preoperative Evaluation Clinic.

Citation American journal of medical quality : the official journal of the American College of Medical Quality; Dec 2020; vol. 35 (no. 6); p. 444-449

Author(s): Pai, Sher-Lu; Irizarry-Alvarado, Joan M; Pitruzzello, Nancy E; Bosch, Wendelyn; Aniskevich, Stephen

Abstract: During the coronavirus disease 2019 (COVID-19) pandemic, the study institution recognized the importance of providing preoperative COVID-19 testing and symptom

screening to ensure patient safety. A multidisciplinary quality improvement team used Define, Measure, Analyze, Improve, and Control methodology to understand the issues, identify solutions, and streamline patient flow. The existing preoperative evaluation (POE) clinic was utilized as a centralized entity to provide COVID-19 testing, symptom screening, and infection prevention education in addition to routine preoperative medical optimization. With the new process, the percentage of patients with COVID-19 testing results returned before surgery increased from 10% to 100%. Of the 593 asymptomatic patients screened by the POE clinic, 2 were found to have positive results. These patients had their surgeries postponed until proper recovery. The study institution has extended this new process to all surgical patients, warranting facility readiness for the resumption of elective surgery.

Title: 'The incident triage area': a response to the COVID-19 pandemic in the Bristol Royal Infirmary.

Citation: Emergency medicine journal : EMJ; Nov 2020

Author(s): Sainsbury, Rebecca; Brennan, Rose; Lockyer, Andy

Abstract: With the onset of the COVID-19 pandemic, hospitals nationwide have been presented with a number of potential challenges, including possible increased volume of patient attendances, acuity of illness and potential for patients to present with an infection that requires isolation. At the Bristol Royal Infirmary, an innercity teaching hospital that manages patients aged 16 and over, we present our response to these projected changes in ED attendances, with the initiation of the incident triage area (ITA). The ITA is a triage station situated outside the ED and staffed by a senior clinician, healthcare assistant and patient flow coordinator. It receives patients presenting as walk-in or via ambulance, and on their arrival aims to establish their risk of COVID-19 and their acuity of illness. This allows for triage of the patient to one of the four zones of the hospital, as well as providing clinical guidance on any initial interventions that patients may require. The benefits of the ITA are that it enables an early senior review of patients to establish their acuity of illness and initiate time-critical medical intervention as required. In addition, patients are immediately cohorted to zones within the hospital based on their infection risk, thereby reducing patient footfall throughout the hospital. Its aim is to reduce the spread of infection, by efficiently triaging and streaming patients who present to the hospital prior to them entering clinical areas, while maintaining patient safety and flow through the ED and initiating rapid management of acutely unwell patients.

Title: Improving the patient experience in the Emergency Department Short Stay Unit.

Citation: Australasian Emergency Care; Dec 2020; vol. 23 (no. 4); p. 265-271

Author(s): Leach ; Vivekanantham, Kellie; Kwong, Alex; Aldridge, Emogene S.; Buntine, Paul G.

Abstract: To explore whether giving patients admitted to the Short Stay Unit (SSU) in the Emergency Department (ED) their medical notes improved patient understanding of key information. A two armed non-blinded randomised controlled trial was performed, with patients enrolled on admission to the SSU from the ED. The intervention was provision of a copy of the patient's medical notes both on admission to SSU and on discharge, together with a plain English statement about their medical condition and a detailed care plan. Control patients were provided with standard care (verbal information). Patients were surveyed in SSU and followed up two weeks post discharge via telephone interview. Treating clinicians,

in both the ED and SSU, were surveyed to establish acceptability of the intervention. Two hundred patients were enrolled, with 176 completing the study. The intervention group found the information provided more helpful ($p = 0.048$) and understood their condition and treatment plan better than the control group ($p = 0.034$). All other data points, despite a positive trend towards the intervention, were statistically insignificant. This study suggests that this simple intervention may positively contribute to the patient experience, with no discernible negative effect on the overall delivery of safe and efficient healthcare.

Title: The impact of GP referrals on overcrowding in emergency departments and acute medicine.

Citation: British Journal of Healthcare Management; Feb 2021; vol. 27 (no. 2); p. 1-6

Author(s): Abbasi ; Khan, Shams; Ameh, Victor; Muhammad, Ilyas

Objectives: A long-standing issue common to most emergency departments worldwide is overcrowding, and the UK is no exception. Overcrowding can have many adverse consequences, such as increased medical errors, decreased quality of care and poor patient outcomes. This service evaluation aimed to review the number of patients referred to acute specialties by their GPs and to evaluate the impact of these referrals on the flow of patients in and out of the emergency department and acute medicine.

Methods: GP referral letters were collected at an emergency department in Greater Manchester, England, between 15 May 2019 and 28 May 2019. A proforma was used by a consultant in acute medicine and a consultant in emergency medicine to evaluate each letter.

Result: A total of 139 GP referrals were received by the emergency department, of which 43 were to general medicine and 96 to other specialties. Of the latter, 54 cases were directed to the emergency department, 20 were directed to a different specialty and 23 did not have a specialty clearly specified. The majority of referrals were for gastrointestinal conditions or abdominal pain, with the next largest category being chest infections. Most of these patients were eventually seen in the trust's ambulatory assessment area to relieve pressure on the emergency department.

Conclusions: Planned and specific use of urgent care centres and ambulatory assessment areas can help to relieve pressure on emergency departments, but appropriate intervention at the primary care level is also necessary to improve patient flow.

Title: Managing intergroup silos to improve patient flow.

Citation: Health care management review; Feb 2021

Author(s): Kreindler, Sara A; Hastings, Stephanie; Mallinson, Sara; Brierley, Meaghan; Birney, Arden; Tarraf, Rima; Winters, Shannon; Johnson, Keir

Background: Health care managers face the critical challenge of overcoming divisions among the many groups involved in patient care, a problem intensified when patients must flow across multiple settings. Surprisingly, however, the patient flow literature rarely engages with its intergroup dimension.

Objective: This study explored how managers with responsibility for patient flow understand and approach intergroup divisions and "silo-ing" in health care.

Methodology/approach: We conducted in-depth interviews with 300 purposively sampled senior, middle, and frontline managers across 10 Canadian health jurisdictions. We undertook thematic analysis using sensitizing concepts drawn from the social identity approach.

Results: Silos, at multiple levels, were reported in every jurisdiction. The main strategies for ameliorating silos were provision of formal opportunities for staff collaboration, persuasive messages stressing shared values or responsibilities, and structural reorganization to redraw group boundaries. Participants emphasized the benefits of the first two but described structural change as neither necessary nor sufficient for improved collaboration.

Conclusion: Silos, though an unavoidable feature of organizational life, can be managed and mitigated. However, a key challenge in redefining groups is that the easiest place to draw boundaries from a social identity perspective may not be the best place from one of system design. Narrowly defined groups forge strong identities more easily, but broader groups facilitate coordination of care by minimizing the number of boundaries patients must traverse.

Practice implications: A thoughtfully designed combination of strategies may help to improve intergroup relations and their impact on flow. It may be ideal to foster a "mosaic" identity that affirms group allegiances at multiple levels.

Title: Using governance and patient flow strategies to improve healthcare service efficiency.

Citation: Australian health review : a publication of the Australian Hospital Association; Feb 2021; vol. 45 (no. 1); p. 22-27

Author(s): Kivic, Amanda; Hines, Laureen

Abstract: The aim of this case study was to share lessons learned regarding strategies likely to increase healthcare service efficiency. Following quality assurance review of statewide Hospital in the Home (HITH) average length of stay (ALOS) and readmission data, Queensland's Department of Health observed that for some of the highest volume diagnoses seen in Queensland's HITH services in 2017, services that used a public-private partnership (PPP) model of care achieved a shorter ALOS than services using a traditional public model of care without demonstrably poorer patient outcomes. To understand the reasons for the differences in ALOS, ALOS and readmission data from 2017 for 10 high-volume diagnoses were retrospectively compared for five HITH services. Two of the services used a PPP and three used a public HITH model of care. Additional data were collected to determine similarities and points of difference regarding how the services operated in 2017. Hospitals that used a PPP HITH model of care achieved shorter ALOS for eight of the 10 diagnoses, with the difference ranging from 0.94 to 5.98 days. Differences between how the PPP and public HITH services operated in 2017 were identified. The findings suggest that the use of governance strategies, criteria-led discharge and financial incentives is likely to support safe shorter lengths of stay.