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Oranges are not the only fruit: the role of emergency departments in providing care to primary care patients

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The lady doth protest too much, methinks

Shakespeare: Hamlet III: 2

Introduction

Effective and integrated primary health care services are seen world wide as the lynch pin of an equitable, efficient and high quality health care. Health services dominated by specialist care suffer either from uncontainable costs (USA with 14% of GDP) or poor quality care (Russia and other former members of the Soviet bloc). Ierachi et al. (2000) argue that Australia should take the retrograde step of endorsing a service which aims to "provide rapid, high quality and continuously accessible unscheduled care, for conditions covering the full spectrum of acute illness and injury" (emphasis added). They aim to provide care "for conditions", not for people. General practice provides care for people, not just diseases or injuries.

The arguments made by authors. fall into three broad categories. The first is that "GP-type patients" are not a problem in emergency departments (EDs), because the overlap between patients who might be managed by GPs with appropriate facilities and EDs is "notional" and that the possibility of substitution of one for the other is putative ("so-called"). Even if "GP-type patients" present to EDs they can be adequately managed there because, as noted, "The purpose of an ED is to provide ... care, for conditions covering the full spectrum of acute illness and injury" (ibid, emphasis added). Anyway, low-acuity patients are not the main concern in EDs because the long waiting times in EDs are related to "... the large volume of complex and sick patients ... combined with increasing pressure on inpatient beds and resources" (ibid.).

Second, the Balmain Hospital General Practice Casualty (GPC) model "... is being inappropriately proposed as a solution for overloaded EDs". This is because the 1997 evaluation of the GPC (Bolton et al. 1997) is "seriously flawed" in a number of respects, the GPC may result in poor quality care for patients in some circumstances, and patient outcomes provided by the GPC might be "... better achieved by GPs working shifts in public hospital emergency departments".

Third, the issues have been clouded by "... the possibility of cost-shifting medical salaries to the Commonwealth". We will address these three matters in turn below.

"GP-type patients" are not a problem in emergency departments

Ieraci et al. imply that low-acuity patients are not "the main concern in EDs" (Ieraci et al. 2000, p. 154). This view would appear to tally with the experience of many of this group of patients. Half of all patients in EDs in triage categories 4 and 5 wait more than 66.86 and 90.97 minutes respectively before they begin to receive care (AMWAC, 1997). Patients leave EDs without being seen in 6% of cases (National Health Strategy, 1992). A recent audit of patients transferred from the GPC to EDs found that 8% of these patients left the ED without being seen. These were patients who the doctor working in the GPC had previously determined would benefit from ED assessment. A US study found no difference in health need between patients who left without being seen and those who remained (Baker et al. 1991). The long waiting times often encountered in EDs, particularly by less acute patients, may result in poor health outcomes and this needs further exploration. It is precisely because EDs fail to meet the needs of these patients that the NSW Health Council has suggested that other models of care need to be investigated for this group (Menadue et al. 2000).

There is good evidence that many patients in EDs might be equally well managed by appropriately equipped GPs, contrary to the imputation by Ieraci and colleagues. Numerous authors have reported on the extent of use of EDs by "GP-type patients", the proportion of which ranges between 30% (Forero et al. 1994) and 84.1% (Harvey, 1997). The National Health Strategy found that 15.0% of patients were definitely primary care and a further 15.4% could be equally well managed in general practice or an ED (National Health Strategy, 1992). The NSW Department of Health reports that 69% of all patients attending EDs are in triage categories 4 and 5, the less acute categories (Health Department of NSW, 1997). Even the authors later acknowledge that "there are obviously overlaps (between patients seen in EDs and those seen in general practice)" and that at least 90% of patients in triage category 5 are not admitted.

Even admission does not of itself imply a need to go to an ED. Most GP referrals could go straight to the ward but are sent to EDs because of hospital policy. Once there they contribute to "the large volume of complex and sick patients (who) ... make the most significant impact on ED waiting times" (Ieraci et al. 2000). Rural GPs - who have the same training as urban GPs - have hospital admitting rights and substitute effectively for the relative scarcity of rural emergency physicians. These arguments suggest that most, if not all, patients in the less acute triage categories can be managed by suitably equipped GPs.

The presence of "GP-type patients" in EDs seems to be a necessary consequence of the role that the authors define for EDs to provide care for "conditions covering the full spectrum of acute illness and injury". GPs too provide care for patients with "the full spectrum of acute illness and injury". However, they not only provide immediate care but also provide preventive and holistic care. Many members of the population only seek care for acute problems, so primary health care models use the opportunity provided by these acute care visits to offer preventive advice. In such cases, patient outcomes (but not necessarily "condition outcomes") have been shown to be poorer in EDs (Burgess et al. 1996).

Locating this debate in the limited perspective of an ED misses the total population view. The only recent Australian population survey covering all ambulatory after hours care found that EDs provide care for 10% of the total population seeking care before 10pm and 40-60% after 10pm for category 4 and 5 equivalent patients (Foster et al., 1996). As the provision of GP services in those hours is highly variable it is likely that ED category 4 and 5 patients are similar to those seen in general practice.

This has been borne out in the Maitland After-Hours trial where a total population is now serviced by a single point of contact within a regional hospital ED. Preliminary findings after the first 6 months of operation show that 80% of category 4 and 5 patients are managed by the GPs in the service, with the triaging undertaken by existing ED triage nurses. The overwhelming majority of patients in the less acute triage categories are returned to the community, and community trained GPs are best placed to provide the initial care to this group both within and outside the ED. This is precisely the approach successfully taken by both the Balmain and Maitland models.

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The Balmain GPC as a model for the care of general practice patients seen in emergency departments

The authors suggest that the GPC is being "... inappropriately proposed as a solution for overloaded EDs" on the basis that the evaluation of the GPC is flawed. The question of how similar patients seen in the GPC are to some of those seen in EDs, and whether the conclusions drawn from the evaluation of the GPC are valid, are matters of interpretation and degree. That the authors are able to draw alternative hypotheses from the study data is an endorsement of the balanced approach that was taken in presenting these data. The reader must draw his or her own conclusion about the validity of these results, and those interested may wish to refer to the PhD on the subject (Bolton, 1999).

On occasion, the authors draw too long a bow on empirical matters. For example, the GPC more closely resembles an ED than a "medical centre". The capacity to observe patients over 2-4 hours (which, in part, is a result of payments not being based on "fee for service"), and the ratio of doctors to nurses, are more typical of an ED than a medical centre. While it is true that "... patients were happier if they did not have long to wait" (Ieraci et al. 2000, p. 158) it is not this simple. Patients were also happier with the services provided by the GPC in comparison to those provided by EDs after controlling for waiting times. GPs in the GPC care for the patient, not just the presenting condition, and it is probable that this is the major factor accounting for the substantially greater patient satisfaction there in comparison to EDs.

The authors argue that the low admission rate seen in the GPC and for patients in triage categories 4 and 5 in rural EDs in comparison to the same patients in urban EDs is a function of patient acuity. There are two equally valid alternate hypotheses. The first is that alternative gateways to hospital admission are provided in rural areas and at Balmain Hospital. The second is that the lower admission rates correlate with the level of experience of the doctor of first contact, particularly if this is related to experience within the community, because junior medical staff are more extensively used in urban EDs - where they typically see the less acute patients.

The authors draw on an interim report on the GPC which reported that GPs might be less likely to comply with selected accepted clinical practice guidelines than hospital residents. No statistical tests were conducted on these data owing to the small sample size. The final data showed that this trend varied in both directions between sites and conditions.

Irrespective of the quality of the GPC research, it is consistent with level 1 evidence from overseas that care provided by general practitioners in managing primary care patients in EDs is both of higher quality and more cost effective than the usual care provided to these patients (Dale et al. 1995b; Dale et al. 1995a; Murphy et al. 1996; Dale et al. 1996). This is not surprising because, as Ieraci et al. point out, one would hope that experienced general practitioners performed better in their area of specialisation than relatively unskilled junior doctors.

In light of this evidence, the issue is not whether the GPC is a flawed model, but whether the present model of service delivery in EDs with respect to less acute patients represents acceptable practice. It is gratifying that Ieraci and colleagues recognise the potential value of general practitioners in EDs however, it is disturbing that they appear to be unaware of the evidence supporting the integrated primary health care model. In order to clarify the issues raised by Ieraci et al. active debate on the role of EDs in primary health care in Australia (which we believe to be limited) is required. The issue of the effectiveness of GPs in EDs would best be resolved by appropriate evaluation of the services that GPs are able to provide to patients seeking acute primary care, with recognition of the full range of outcomes for the patient, not just the impact on the presenting problem.

Cost shifting

The authors are right that their discussion has been clouded by "... the possibility of cost-shifting medical salaries to the Commonwealth". Cost shifting is an economic issue, not a health care quality issue. The GPC funding model explicitly addressed the issue of cost shifting. Approximately one third of the funding is provided by the Commonwealth and two thirds is provided by NSW Health through Central Sydney Area Health Service. The funding for the service has been enshrined in the National Health Care (Medicare) Agreement as a result of acceptance by both levels of government of the economic evaluation of the service, which demonstrated cost savings at both state and Commonwealth level.

Conclusion

The authors correctly conclude that "... both general practice and emergency medicine ... should work in a complementary way - as respectful colleagues, not competitors" but they fail to recognise that both are part of the primary health care system. A recent independent review of NSW EDs commissioned by NSW Health (KPMG 2000) recommended that NSW emergency services develop a "hub and spoke model" which included "... the possible re-designation of smaller services as urgent care centres" (p. 3). It went on to say that "... there is strong support for the view that the development of a critical mass of expertise, particularly in specialised areas of care, leads to better clinical outcomes" and so "metropolitan EDs of level 4 and above with annual attendances of 25,000 or less (should) be reviewed to determine if alternative structures can be developed to improve the critical mass of services" (p. 11). This model recognises that emergency services are but one part of an integrated primary health care system.

Emergency services are a subsection of acute care services on which the Australian community places great value. Every opportunity should be given to specialists in this area to maintain and improve their life saving skills. It is appropriate that emergency physicians work within an integrated primary health care system in order ensure that they have adequate clinical exposure. There is evidence to suggest that patient outcomes would be optimised if this were to occur within hospitals' Divisions of Acute Primary Care. Such Divisions should be under the direction of primary medical care specialists and emergency physicians should have the opportunity to staff EDs (which truly deal with life threatening conditions) within such Divisions.

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