Clinical role or service specialisation and quality of care

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There has been a trend in many healthcare innovations and quality initiatives to try to improve quality of care at the entry point to services by increasing specialisation of roles and services. This is partly based on the idea from industry that greater specialisation leads to higher consistency which reduces variation and improves quality.

For example in general practice we have seen development of general practitioners with a special interest (GPwSI) and/or specialist clinics for diabetes or asthma. In prehospital ambulance care there are now community paramedics or practitioners, critical care paramedics and advanced paramedics. In hospitals we see medical and surgical admissions units, ambulatory emergency care clinics and primary care units operating with emergency departments.

What evidence is there for the effect of these initiatives on key dimensions of quality such as effectiveness, safety and patient experience including access and timeliness? If evidence is lacking can we predict the likely effects and possible harms? What general principles, if any, can we glean from this?

Hospital services by their very nature are specialist but the ‘front door’ of many hospital services is becoming increasingly complex. For example not only are there emergency departments, there are also emergency admission units, ambulatory care units and care of the older person outpatient clinics which may all deal with poorly differentiated or undifferentiated illness. During a recent consultation I saw a patient with mild memory loss and a possible deep vein thrombosis. I contacted the ambulatory care unit which deals with patients who require specialist assessment but do not necessarily require admission to hospital. They asked me to contact the specialist venous thrombosis clinic. The clinic nurse told me they had filled their quota of referrals for the next three days and so could see the patient in four days’ time. Many of these specialist clinics only operate during the working day thus restricting access further.

In the prehospital setting, emergency care practitioners (ECPs) have been found to provide more treatments, carry out fewer investigations, and are less likely to admit people to hospital with patients satisfied with the care they provide. On the other hand, the evidence for critical care paramedics (CCPs), who are skilled to deal with those patients involved in serious trauma or requiring prehospital life-saving measures, is less clear. ECPs are skilled to deal with undifferentiated illness which is common in the prehospital setting whereas CCPs apply their skills to specific relatively rare situations of trauma and critical illness. As most presentations in prehospital care involve undifferentiated illness it becomes easier to apply the concept of ‘right skill, right time, right place’ with ECPs than with CCPs.

The development of GPwSI has led to greater opportunities for referral to minor surgery, ear nose and throat, urology, gynaecology and other specialist services provided in community clinics at a much lower cost than hospital clinics. The evidence for specialist clinics in general practice suggest that these could reduce referral to hospital outpatient departments for example for conditions such as asthma and chronic obstructive pulmonary disease. The effects on quality of care have been mixed and there is confusion and ambivalence about the role of GPwSI, integration into services and relationship with generalist services. The effect of some specialist clinics in general practice was often to limit access for people with long-term conditions to specific sessions, days and times and with particular doctors or nurses. In addition, the provision of a specialist clinic will not reduce the requirement for acute responsive care. Many disease management clinics for asthma, diabetes, hypertension and other long-term conditions have gradually been replaced by protocolised (usually nurse-run) appointments supported by computerised templates and prompts within normal clinics which provide consistency of care without reducing access.

There are a number of problems facing role and service specialisation which are likely to worsen quality of care. Firstly, generalist rather than specialist skills are needed to help patients with undifferentiated illness or complex combinations of physical, psychological or social comorbidities. Secondly, specialist
services will reduce quality if they are complex to access for those requiring them or if they decrease access to services for the majority of those requiring care. Thirdly, increased role or service specialisation will tend to increase fragmentation of services making care navigation more complex for service users and health professionals.

What conclusions can we draw from this? There is limited evidence many role or service specialisations. The role development of nurses, paramedics, or other health professionals at the front line with greater generalist skills (e.g. generalist nurse practitioners and ECPs) will tend to improve quality of care whereas development of specialist practitioners (e.g. CCPs) with a restricted focus will tend to worsen quality, particularly when the majority of patients they are seeing have undifferentiated or complex comorbid illness. In contrast, GPwSI in being generalists while providing specialist services have the potential to improve quality of care as long as this is not at the expense of reducing generalist services.

When redesigning specialist clinical roles and services, healthcare organisations will need to consider the effects on quality of care of role and service specialisation, particularly when trying to meet the needs of patients with undifferentiated illness, long-term or complex comorbid conditions.

REFERENCES


PEER REVIEW
Commissioned; not externally peer reviewed.

CONFLICTS OF INTEREST
None declared.

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