Editorials

Interface medicine:

a new generalism for the NHS

THE ACUTE CARE PATHWAY

We are practising medicine at a time of unprecedented demand in the acute care pathway, with capacity reaching saturation in both primary care[1] and in hospitals.[2] While these facts alone mandate a change in how we deliver acute medical care, we are aware that, for some of our patients, the hospital bed-based model of care can cause unintended harms.[3] The negative impact of acute institutional care, compared with a credible community-based alternative, can be seen in the differential rates of harm in trials of hospital in the home.[4] Observational studies have also linked the hospital environment to ongoing functional decline, over and above the impact of acute illness.[5] Faced with these data, how do we change the model of care for acute medical illness and create a sustainable acute care pathway?

AMBULATORY EMERGENCY CARE

The Royal College of Physicians' Future Hospital Commission recognised that the existing structures of acute care are no longer fit for all of our contemporary population.[6] Ambulatory emergency care is recommended as a default care model but this leaves a formidable number of unknowns: the physical environment for assessment, patient selection for ambulatory rather than hospital care, the mix of professional skills needed to deliver safe out-of-hospital care, the diagnostic test platform and range, monitoring and interventions in the community, costs, and patient and carer experience of home-based care at higher levels of acuity of illness. Given these uncertainties, how do we construct services that deliver cost-effective ambulatory care?

Although there is some guidance from existing literature of hospital-level interventions delivered in the home environment,[4] the majority of trials recruited patients who had been assessed in an emergency department, applied strict inclusion criteria, and delivered a small range of healthcare interventions. This limits the extent to which we can use published trials to design a service that is capable of operating outside of traditional settings,[6] that can see undifferentiated illness, determine location of care, and sort out the dysfunctions affecting multiple chronic disease processes conspiring together with a new insult to produce an acute clinical syndrome.

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RESPONSE TO RISK

If we are to reverse the increasing trends in hospital admissions, in particular for selected patients living with frailty, where there may be an uncertain balance between the benefits and harms of hospitalisation, we need to ask, 'What do we do instead?' Patients who present to a first-contact healthcare provider in the community and are deemed to require an escalation of their care environment are at a critical interface in the acute care pathway. Urgent transfer to an acute setting is a binary response to risk mitigation: to establish a diagnosis supported by biomarkers, imaging, or treatment response and determine the level of intensity of care needed to deliver a stabilisation or reduction in risk. If community practitioners only have one choice, where perceived risk outstrips their ability to mitigate it, then, as more and more people with urgent care needs are seen in primary care, the natural result is saturation of the capacity of the receiving acute setting. Is there a way to provide more than a binary response and calibrate the care model to perceived risk?

In many ways, this is what the Future Hospital Commission is setting out, resonating with the NHS England Five Year Forward View.[7] We can only decongest our hospitals, so that they can function and maintain themselves as safe places of care, if more urgent care is managed 'outside the hospital walls'.[6] Although primary care has been doing this 24 hours a day since the start of the NHS, community health care needs to work in a different way and with an increase in capacity to produce a calibrated response to risk that does not invoke a default escalation to hospital. We have a 24-hour primary care model that mixes registered practices and out-of-hours providers but it is limited in its access to diagnostics, therapeutic interventions, and strategies for closer monitoring for clinical deterioration.[8]

THE ACUTE CARE INTERFACE

How could we scale up our ability in the community to see patients who are at an interface between primary and acute care, with undifferentiated illness and therefore undifferentiated risk? We would need to move the setting for some processes of differentiation that are currently in hospital to the community. This requires rapid diagnostic support that is credibly delivered by point-of-care blood tests and point-of-care imaging together with clinicians who can make accurate decisions about risk based on a granular diagnostic assessment. This changes both the nature of the clinician and the tools needed to deliver care compared with the traditional doctor's bag — the skills of the interface physician therefore need to incorporate elements of both primary care and acute hospitalist practice. We are, in effect, asking physicians to have skills that are needed at either side of the primary/secondary care interface for the routine management of acute illness syndromes and accurate determination of location of care. Is this such an unprecedented route to take?

In the US, there has been a growing recognition that patients with acute illness and multiple morbidity need a different care model that addresses the

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complexity of decision making at the interface of community and hospital care. This addresses two important decision 'theatres' at either side of a potential hospital admission — the decision to admit (and, if not, access processes of care that have been traditionally associated with bed-based hospital care) and after an admission by bridging a gap between discharge from hospital, a setting with its care response measured in minutes, to community practice with a care response measured in hours to days.

Although the two main physician roles that have evolved in the US have been described as 'extensivist' or 'comprehensive', they share the skill set of ability to manage elements of acute hospitalist work and primary care.[9] This effectively blends the skills of two generalists, those who can tackle acuity in a hospital setting and those who can undertake whole-person chronic disease care incorporating an understanding of the benefits of relational continuity.[9] Can we train physicians to acquire these seemingly different skill sets?

A NEW GENERALIST

To answer this question, we challenge the very concept of the family doctor. At the cornerstone of primary care is a vertical age generalism, that is, all ages with all conditions. However, we can describe an additional generalism that is horizontal in terms of age, which includes community and acute work for adults and particularly patients living with frailty. We could train interface physicians in dual settings as we would not require such a comprehensive overview of all of medicine, allowing a generalism of settings instead of a generalism of 'all ages' medicine. The fundamental principles of gatekeeping, relational continuity, and managing uncertainty can coexist with the ability to interpret and manage acute syndromes within a credible out-of-hospital service. This is not family doctoring, but it is a generalism that is born from long-established skills to address the change in our population and support the evolution of care models that can absorb pressure from overwhelmed traditional services.

There are examples of this evolution already in pockets around the country,[10] and primary and acute care vanguard sites within the New Care Models programme trial some elements of the integration that is needed at the interface between primary and secondary care. However, integration is not just bolting two services together and each continuing in its own way. Managing the continuum of risk in acute presentations with tailored care that is calibrated to that risk is not routinely done in hospital or primary care. The different approach described here is one way to allow more acute care to be delivered in a community setting and therefore achieve a component of the Sustainability and Transformation plans.

Many questions remain about how we can best manage the interface between primary and secondary care including realignment of resource. Research is needed to understand all the elements of delivering acute ambulatory care in spite of the enthusiasm of policy documents. The exploration of this emerging care model is a response to a time of crisis as we ask ourselves, 'What are we prepared to change?' Whatever else we consider, the answer must include 'ourselves'.

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Provenance
Commissioned; not externally peer reviewed.

DOI: https://doi.org/10.3399/bjgp17X693173

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