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Sacrificing patient care for prevention: distortion of the role of general practice

Expansion of preventive clinical recommendations in primary care has had the unintended consequence of destabilising this foundation of the healthcare system, argue **Minna Johansson and colleagues**

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For thousands of years, clinicians cared exclusively for people who were sick. Only over the past five decades has primary care's focus been increasingly redirected towards risk, not symptoms.¹ The change to medical prevention was ushered in during the late 1960s, when diuretic treatment of diastolic blood pressures of 115-129 mm Hg was found to prevent cardiovascular events with a number needed to treat (NNT) of 6 people a year.²⁻⁴

This beneficial intervention was targeted at a high risk population. However, today primary care is increasingly asked to prevent disease in lower risk populations that, at times, compose the majority of the population. Lower baseline risk leads to higher numbers of patients needed to screen and treat—ranging from the hundreds to infinity.⁵ Although the principle of “prevention is better than cure” is intuitively appealing, it is also empirically limited and distorts clinical relationships: the expansion of and focus on primary prevention interventions for low risk patients is incongruous for a profession dedicated to the relief of suffering.

This expansion of medical territory—without a commensurate benefit or an impossible expansion of time—is a major contributor to the primary care crisis in many high income countries. To save primary care from collapse, the enthusiasm for minimally beneficial clinical preventive services in asymptomatic, low risk populations must be curbed and responsibility for primary disease prevention returned or reassigned to public health.

Reconciling competing demands with patient needs

Each new prevention activity or expanded target population exacts an unacknowledged opportunity cost on primary care.⁶ Because time cannot proportionally increase, each extra act of prevention should create improved health outcomes beyond the status quo of caring for sick people. But prevention recommendations are rarely (if ever) evaluated with this perspective. For example, US primary care physicians require 27 hours each work day to follow guideline recommendations, with more than half of that time directed to prevention interventions (fig 1).⁷

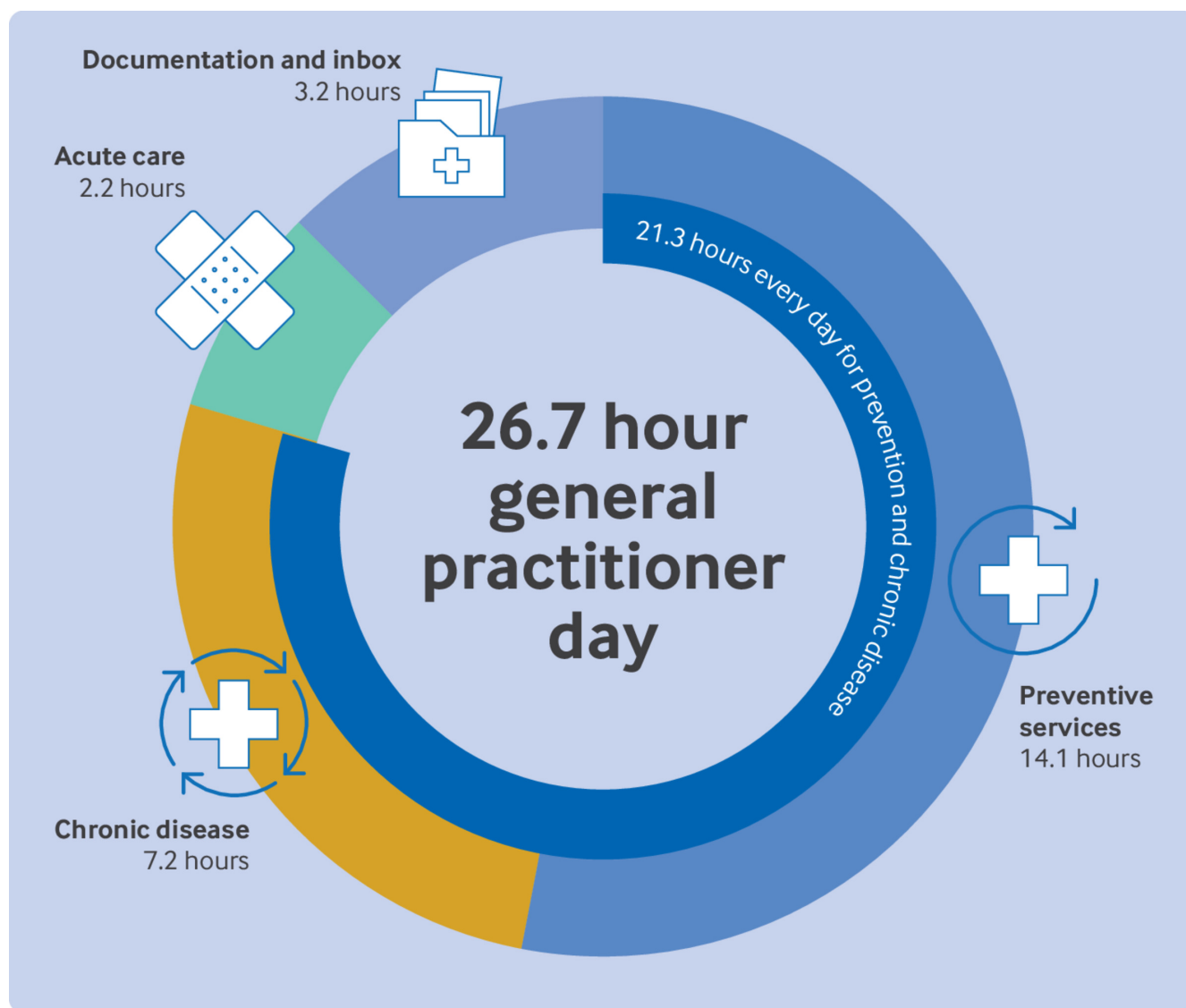


Fig 1 | Time needed to provide adult primary care per clinical day. Data from Porter et al, with permission⁷

Such interventions continue to increase, embedded in a proliferation of guidelines.⁶ The disconnection between expectations and reality is staggering, placing clinicians in an impossible situation. Primary care deserves reality based recommendations that respect the

fundamental constraints of time. Figure 2 sets out several options for primary care to manage the demand. All but one of these options continues to incorporate low yield prevention, with absurd and harmful consequences.



Fig 2 | Strategies for GPs to meet current recommendations for preventive, acute, and chronic care within a 10 hour day

False promise of prevention in primary care

The wish for prevention has animated medical doctrine, though not its practice, for thousands of years. Although addressing upstream

causes to prevent downstream illness is intuitive, medically based prevention, particularly primary interventions in asymptomatic people, is often marginally effective at best. For general health

checks, systematic reviews repeatedly find they do not reduce all-cause or cancer mortality.⁸

Only 3% of the lifestyle interventions recommended for the UK's NHS are supported by high or moderate certainty evidence.⁹ Screening and brief interventions for excessive alcohol use—which may require 10–15 minutes per patient—have no effect in the heaviest drinking population.¹⁰ Similarly, despite being recommended in numerous guidelines, counselling patients to increase physical activity does not have consistent evidence of improved patient centred outcomes.¹¹ More recent data show that the time spent completing the electronic health record is longer than the actual consultation.⁴¹

Even for screening recommendations with demonstrated benefit, the effect in low risk populations is small in absolute numbers, requiring substantial allocation of primary care time.⁶ In colorectal cancer, for example, around 1000 patients have to be screened over 10 years to prevent one death, similar to breast cancer screening.^{12–14} For lung cancer screening, primary care clinicians have made policy makers aware of their lack of time to follow guidelines, and real world analysis shows that the benefits of screening have diminished and harms have increased compared with those reported in trials.^{15–17}

Redefining illness to include anyone who might get sick means that an increasingly large proportion of the general population—at times, its entirety—are defined as “in need of medical attention.” As a result, prevention recommendations for primary care widely exceed available GP capacity. For example, if European guidelines are applied to the general population, over 80% of adults should see their GP to reduce their risk of cardiovascular disease,¹⁸ requiring more GPs than currently practise in any high income country.¹⁹ To implement lifestyle interventions 1.5 times more doctors (all specialties) and five times more nurses than currently work in the NHS would be needed.⁹ Even if the often invoked but rarely funded “primary care team” was used, this would require the healthcare workforce to expand exponentially, capture an even higher proportion of limited societal funding, and still may not improve prevention.^{20 21}

One reason for this dynamic is that prevention recommendations often reflect “specialty bias,” when physicians recommend interventions specific to their area of expertise, often resulting in greater use of healthcare services and inducing neglect of other primary care responsibilities. Another reason is that preventive services are only added, never subtracted. Yet recommending groups face no penalty by contributing to an untenable cumulative primary care burden. Not having enough time leads directly to outright harm from screening, even when it is done to help people who are unwell, as in the case of perinatal depression: “As one participant shared, ‘I took the test, and they told me that they felt I was suffering from postpartum and that was it.’”²²

Medical hubris and industry interests

Even when benefit is possible, the effect of preventive care directed at low risk populations, as represented by the number needed to screen or counsel, is small in absolute numbers. Yet guidelines continue to suggest individual approaches to prevention when public health policies are often far more effective.

For example, screening older men for abdominal aortic aneurysm results in a small absolute reduction in disease specific mortality, but factors outside healthcare (primarily reduced smoking) have actually decreased deaths from aneurysm by 70%.²³ Screening for lung cancer is estimated, at best, to prevent around 12 000 lung

cancer deaths each year in the US,²⁴ but society-wide interventions to decrease smoking are estimated to prevent 160 000 deaths every year, more than 10 times that of screening.²⁵ Though GPs are recommended to ask every patient about smoking, almost all of the reduction in American smoking in the past 25 years has been the result of policy measures, not clinical care, with “large increases in cigarette taxes relative to initial prices” continuing to be the most effective action.²⁶ Similarly, these policies are also the most effective way to reduce harms from alcohol, as shown by Scotland's introduction of minimum unit pricing. Analysis suggested that this policy was associated with significant reductions in deaths and hospital admissions, wholly attributable to alcohol consumption.²⁷

Unsurprisingly, though not acknowledged in guidelines, care for symptomatic patients provides substantially greater benefit than preventive care. When compared with prevention activities with demonstrated evidence of benefit, symptomatic care provides an estimated benefit ratio of 26:1.⁵ Yet—with smoking as an exception—the overall change in policy during the past 50 years is to socialise risks by implying that an individual is accountable for harms they experience as targets of corporate and governmental interests. Examples of these risks include obesity; promulgation of highly processed foods; “big alcohol”; industrial pollution; and harmful heat from climate change. Slogans advise the public to “Drink responsibly” for alcohol, “Balance what you eat, drink and do” for fizzy drinks, and “Be gamble aware.” Individuals are implored to be “responsible” and healthcare to engage in “prevention.” Considerably more effective and less costly interventions would be public policy such as taxes and regulations that may not be attractive politically but, unlike primary care, actually succeed.²⁸ The commercial determinants of health—including the medical prevention industry—are powerful and best countered with forces of their own size, not individual GPs.^{29 30}

Prevention services important to both individual and public health, such as vaccination, are threatened by worsening access to primary care. Vaccines, intentionally standardised for widespread adoption, should be provided in settings based on convenience—for example, in pharmacies—although they would also be likely to need extra resources. This relocation improves uptake⁴² and allows primary care to focus on its primary purpose of symptom based, longitudinal care.

Words matter

Terms such as “risk” and “prevention” are problematic; we all have some degree of risk and ultimately cannot evade death. The result is a professionalisation and bureaucratisation of definitions in ways that are deceptive. Does mammography “prevent” breast cancer when it reduces harm for one or two people out of 1000 over 10 years?²² Does reducing systolic blood pressure from 160 mm Hg “prevent” cardiovascular disease when fewer than 1 person in 50 benefits over three years?³¹ Is it an indication for medical care when nearly 90% of a population has a condition such as the newly created cardiovascular-kidney-metabolic syndrome, for which three of its five stages are asymptomatic?³²

Primary care patients have the reasonable expectation they can be helped by their GP. Instead, they are part of the “treatment paradox” described by former *BMJ* columnist Des Spence: “an individual patient, despite many years of investment ... gets virtually nil health benefit. Any relative benefit is seen only at the population level.”³³ A “personal probability of benefit” reveals that patients generally have less than 1% chance of benefiting from most clinical prevention services.³⁴ These remote chances are a far cry from the low NNT of

6 for high diastolic blood pressure, far better odds that characterise worthwhile primary care prevention.

Physician moral injury and distorted targets

Modernity in medicine has come to mean focusing on a population, not on a patient. Though our traditional oath is to the patient before us, we often enter the consultation with numerous preventive recommendations that must be met yet may not align with the patient's concerns.³⁵ The mismatch between the patient's needs and the burden of preventive care inevitably leads to ethical stress. This is especially so when imposed quality metrics and other incentives—primarily focused on prevention—trump a patient's needs and financially penalise GPs for prioritising sick patients.^{5,35} Prevention also disproportionately advantages people with higher socioeconomic status, who tend to be more likely to access screening and prevention, thereby reinforcing the inverse care law: disadvantaged populations, who need more healthcare, actually receive less.^{36,37} Primary care has been identified as a way to reduce inequity, but focusing on prevention does the opposite by compelling clinicians to evaluate risk factors instead of ministering to patients with present needs.

GPs attempt to balance these impossible demands, eventually experiencing moral injury and becoming disillusioned. Many are leaving the profession, and recruitment of new colleagues is increasingly difficult. Patients consequently struggle to access care.³⁸ When they do, time with a clinician is scarce, the consultation is hurried, and they are quickly interrupted.³⁹ For those who are able to schedule an urgent appointment, it is often not with their own GP. This vicious circle leaves desperate patients dependent on emergency care, or forgoing care entirely, for problems that would have been better addressed in longitudinal and trusting relationships with their GP—the continuity that confers better outcomes than any clinical prevention.⁴⁰

Restoring the balance

Primary care needs to be restored with a sharper division between the care of individuals versus the care of populations. Individual care—whether for acute episodes of illness and distress, or for chronic conditions—requires a complex skill set and long training. Most types of preventive care aimed at reducing illness in whole populations do not require this background. Such efforts can be undertaken by informed individuals themselves, or by health professionals with a smaller skill set and time dedicated for specific tasks.

More importantly though, such efforts would likely have greater success at lower cost if they focused on addressing structural, social, and commercial determinants of poor health. Countries adopting population interventions, whether immunisation, screening, or the offer of lifelong medication, should take care they do not increase the already overwhelming workload of health professionals who look after acute and chronic illness. Care for illness will always be needed, and trust, continuity of care, and attention to the individual will always form the essence of good primary care. If we wish to encourage and prioritise these characteristics, GPs must be relieved of tasks better done by others.

The strategy of improving the general population's health through preventive medical care, one individual at a time, does not work—but it is undoing our ability to help people in need while also bankrupting our countries. To save primary care, preventive medicine efforts must be made proportionate to their nominal impact and responsibility for prevention of disease must largely return to the public health arena.

Key messages

- The exponential expansion of preventive medicine over recent decades is a major contributor to the primary care crisis in many high income countries
- Minimally beneficial clinical preventive services in asymptomatic, low risk populations must be removed from primary care's scope in order to prevent its collapse
- Responsibility for primary disease prevention should return to public health, where it will have greater success at lower cost
- This would allow primary care to focus on people who are sick, suffering, and symptomatic

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