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EDITORIALS

The strength of primary care systems

Stronger systems improve population health but require higher levels of spending

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A recent article in *Health Affairs* by Kringos and colleagues seems destined to take its place alongside other seminal studies that support the importance of investing in a strong system of primary care for a well functioning health system, better population health, and perhaps even greater health equity.[1-3]

The team of researchers from the Netherlands Institute for Health Research used statistical databases and government reports from 31 European countries to measure the strength of five primary care dimensions—structure, access, coordination, continuity, and comprehensiveness. They looked at the association between each dimension and healthcare spending, patient perceived quality of care, potentially avoidable admissions to hospital, population health, and health inequality according to socioeconomic status.

They found that population health was better in countries that had a strong primary care structure and robust mechanisms to support coordination and comprehensiveness. The strength of primary care systems was measured by the density of primary care providers and the quality of their work environment. Stronger systems were associated with lower rates of avoidable admissions to hospital and fewer potential years of life lost for most of the conditions that were studied. These benefits were also linked to gate keeping with other healthcare professionals (coordination) and a mix of primary care practitioners who deliver a broad range of services (comprehensiveness). These findings confirm the hypothesised effects of a strong primary care system.

However, and contrary to hypotheses, countries with stronger primary care structures also had higher levels of healthcare spending, after adjusting for gross domestic product per person. It had been expected that primary healthcare would deliver similar services at a lower cost than specialist services and would reduce overall costs through avoidable admissions to hospital and preventive care. This study suggests that health dividends cannot be obtained without financial investment, but the good news is that increased comprehensiveness is associated with a lower rate of growth in healthcare spending. Comprehensiveness was measured by the diagnostic and therapeutic technologies available to permit problem solving at the primary care level, and by the availability of nurses and other healthcare professionals to promote and maintain self care. Although investing in robust primary care systems rather than specialist care might not save money in the short term, it buys good outcomes at a population level and slows the rise in healthcare costs.

One of the study's intriguing findings comes from the analyses of health inequality by socioeconomic status. Contrary to the researchers' hypothesis and many reports,[3 4] the strength of the healthcare structure, access to healthcare, coordination, or comprehensiveness could not explain why poor health is concentrated in lower socioeconomic groups. This runs contrary to the common belief that the needs of poorer groups are covered by community based primary care, whereas specialist care tends to be used by higher socioeconomic classes.[5]

However, the exception was continuity of care. Countries with a more formal affiliation between practitioners and their patients, in which a higher proportion of patients were highly satisfied with interpersonal dimensions of care, had more equality of self rated health (although not the prevalence of asthma or diabetes). Most advocates of the power of primary care to improve the equity of healthcare would have expected a link to the structure of primary care and access, rather than the continuity of care between doctors and their patients.[3 4] To interpret this finding, it must be remembered that health systems, not individual clinicians and patients, were the unit of analysis in this study. A plausible explanation at the system level is that more egalitarian societies invest more in primary care and that relationships between providers and patients are more equal in such societies. Reasons for investments in primary care, more than just the size of such investments, might relate to deep rooted cultural factors that make such investments possible and also support affiliation between patients and providers. Again though, this suggests a link to structure and comprehensiveness rather than continuity.

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Alternatively, the association with continuity might reflect the cumulative effect of long or strong clinician-patient relationships. Many studies have shown that strong relationships between patients and their doctors are associated with better compliance with recommendations, increased preventive care, and reduced emergency admissions to hospital and costs.[6] No studies have shown that continuity can reduce inequality in perceived health, although analysis of aggregate data (across and within countries) suggests that such an association might exist.[7 8] They posit that one mechanism for the negative health effects of being in a lower socioeconomic group stems from the psychological anxiety that comes from being perceived as lower status by others: devalued, looked down on, powerless. Respectful clinician-patient interactions might therefore result in better self perceived health, if not disease prevalence. A mountain of evidence shows that low socioeconomic status is one of the highest risk factors in those presenting to primary care. It is therefore possible that health systems that support and value high quality clinician-patient relationships might give patients—most of whom are in a lower social class than their clinicians—an experience of respect, validation, and empowerment that translates into lower health inequality.

Although Kringos and colleagues' findings pertain mainly to health system design and investment, they depend on a strong foundation of well trained and competent clinicians. When combined with sufficient resources and technological platforms, the result is improved population health outcomes and reduced avoidable hospital admissions. The combination of a whole person approach, respectfulness, and continuity of personal care serves to counter the burden of health inequality.

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