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Bridging the gap between primary care and public health

■ **In August 2007, a registrar of our general practitioner training program in The Netherlands diagnosed pneumonia in a young, otherwise healthy, male patient. The registrar established that the patient was in a stable condition and had no risk factors for respiratory tract disease. After consulting the GP supervisor, the patient was treated in the community. This consultation illustrates the place of primary care in the 'ecology of medical care'¹ – most patients contact primary health care professionals for most health problems, most of the time. Through primary care, the use of medical care facilities is navigated, and patients' needs are taken into account. The personalised decision was to treat him at home, the navigation decision that no referral or hospital admittance was needed.**

The discussion between the registrar and the GP supervisor also focused on the fact that pneumonia in an otherwise healthy young man, in the middle of the summer, is unusual. Another recent case came to mind, and consulting nearby practices highlighted that a couple more 'unusual' cases of pneumonia were around. Supervisor and registrar thus related the individual case to their practice and community population. The infectious diseases authorities, duly notified, established Q-fever as the cause of these cases, and goats its likely source.² This aspect of the case exemplifies how primary care presents a link to public health.

This feature of primary care has been undervalued in recent years, with the emphasis on evidence based guidelines to improve the quality of individual care. In our view, strengthening this link will improve people's health.

The prevention and management of infectious diseases is an example of the benefits of public health/primary care interaction: the above example comes from a practice in a community with intensive agriculture, with animal/human transfer of infections as a community specific determinant of health. Awareness of the

infected livestock enhanced early detection of transfer of Q-fever to humans. Subsequent vaccination of the livestock provided the most effective health protection of the community, and this was only possible through the involvement of veterinary authorities.

In general, three principles of promoting health result from linking primary care to public health:

- integrating prevention, early diagnosis and treatment
- combining individual and collective approaches to health
- understanding and defining the limits of individual health care and establishing collaboration with sectors other than health care.

Another important example of public health/primary care interaction is the aging of populations with high prevalence of chronic morbidity³ and an increase in the number of frail elderly with comorbidity. The health protection of aging populations will also benefit from the three principles:

- integration of prevention, early diagnosis and proactive treatment over many years will postpone mortality and morbidity, and reduce demand for expensive interventions
- in chronic diseases, individual 'lifestyle change' plays an important role. However, individual interventions may be substantially limited, unless embedded in societal actions of government, industry and other sectors (eg. tobacco legislation, food labelling, advertising).⁴ Health advocacy of GPs and other community leaders is often necessary to bring the societal partnerships together for such actions
- individual care is directed to preserve functioning and social participation. Collaboration between different sectors and disciplines to redesign living conditions and provide a safe and stimulating environment for physical and social activities is vital. In The Netherlands, this has led to the primary care specialty of 'Dutch nursing home physician'⁵ that provides re-activation in the community.

Health status and social conditions that determine health⁶ vary between communities, and surveillance of a community's health

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status and needs is a core instrument of community oriented primary care. It provides the intelligence from which a proactive response to needs can be prioritised, and societal actions advocated. It enables the tailoring of care to those individuals and populations at highest risk. This selective approach will enhance effectiveness and efficiency of care and promote safety of care. Thorough data collection and analysis are essential, and there is a long tradition in primary care in the management of databases that can serve in this capacity.³

Combining this surveillance of health problems and risk factors of the practice population with other data sources will substantially empower the link between primary care and public health – the two examples in this article would be a link with veterinary data of the livestock, or the housing conditions of frail elderly.

Medical informatics and electronic records make such information pooling a realistic proposition. It is up to primary care and public health to apply technology to identify community needs; plan the best individual and collective strategies to respond; and to advocate for involvement of other sectors. This all makes for better community health.

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