

Complex patients: How healthcare must adapt to their needs

Written by: Martin Wenzl, OECD Health Division and Elias Mossialos, London School of Economics and Political Science

Last update: 3 January 2018



© Sylvie Serprix


Pepe is a 74 year-old widower, who lives with one of his two sons in a small apartment in the Spanish city of Valencia. His son works at night and sleeps all morning. Pepe spends most of his day at home and feels lonely and depressed. He suffers from pulmonary fibrosis, heart failure, hypertension and dyslipidaemia. He takes corticosteroids, nebulisers and inhalers, as well as drugs against hypertension, statins and anti-coagulants. Pepe is often short of breath and also requires oxygen therapy. Sometimes he feels like he is dying and his son takes him to hospital. In the last 18 months, Pepe visited the

hospital emergency room 39 times. He was admitted to the pulmonology department in eight of these visits

Pepe's case might sound unusual, but it is all too common. Life expectancy has increased dramatically over the past century but longer lives have also been accompanied by chronic health problems. Non-communicable diseases are now the leading causes of morbidity and mortality in the ageing populations of OECD and upper-middle income countries. Many patients with chronic health problems suffer from several conditions at once. Such multimorbidity likely affects more than half of over 65 year-olds in the OECD area, and there may actually be more under 65s with multimorbidity in absolute numbers. Multimorbidity tends to be concentrated in poorer communities, and the combination of various diseases with disability, social and other non-medical problems makes the healthcare needs of these patients complex.

While a high degree of specialisation in medicine has undoubtedly contributed to progress in overcoming diseases, it has also led to fragmentation. Healthcare is organised by types of disease, corresponding medical specialities, distinct provider organisations, inefficient workflows, budgetary silos, and provider contracts and payment systems tied to activities rather than patients. Hospitals have come to enjoy a special status among providers and consume some 35% of total healthcare expenditure in OECD countries.

Such a structure is poorly suited to the needs of complex patients, who require care from a variety of providers, including generalists, specialists, providers of social care or ancillary services and others. Rather than being treated for a collection of distinct diseases, which can result in contradictory advice from the various well-meaning professionals they see, incompatible treatments and poor health outcomes, multimorbid patients require a holistic approach to care that helps them access the right services .

multimorbid patients
require a holistic approach
to care that helps them
access the right services 

At the OECD Policy Forum on the Future of Health in 2017, ten recommendations will be presented to policymakers to help design high-performing healthcare systems for complex patients. These recommendations were developed by an expert group under the auspices of the London School of Economics and the Commonwealth Fund. They make not only a strong case for putting people, rather than diseases or providers, at the centre of care, but demand fundamental paradigm shifts in medical practice and the organisation of healthcare.

The recommendations call for making care co-ordination a high priority, for instance, and engaging patients in decisions about their care, as well as involving informal caregivers more closely. They also call for integrating health and social care, physical and mental healthcare and for integrating clinical records to facilitate communication between providers and allow information to flow with

patients. Using data to identify proactively patients whose care can be improved is another recommendation.

A key challenge is how to find cost-effective ways of providing care for complex patients. Data from Canada and the US, for example, suggest that some two thirds of total health expenditure is attributable to the top 10% of patients with the highest cost. Many of these high-cost patients have complex needs. More internationally comparable data are needed, but this pattern is likely to be similar in most OECD countries. However, it would be a fallacy to expect easy savings from improving care for all high-cost or all complex patients. Some complex patients receive care that is entirely appropriate and the evidence suggests that only carefully targeted improvements, aimed at people like Pepe who do not receive the right services, will be effective. Even then, improvement strategies tend to require additional up-front investment or may increase costs through addressing unmet need. Savings can only be achieved by reducing wasteful over- and misuse.

While this is a daunting task, there are promising projects in OECD countries that show what can be done. The Integrated Model for Complex Cases within the Chronic Care Strategy in the Valencia region is such an example and has been scaled up since 2011. For Pepe, it sharply improved care and well-being. Electronic health records, which cover nearly the entire population of 5 million, were screened automatically. Pepe was flagged as a “complex case” in this process. The Regional Health Authority employs “nurse care managers”, each of whom has responsibility for a defined number of complex patients. A hospital-based nurse care manager had Pepe located in the pulmonology department during his last stay. The manager planned Pepe’s discharge and informed a community-based nurse care manager, who reviewed Pepe’s records and performed a case assessment. This multidimensional assessment, which considered Pepe’s medical needs, support available from his son and his living environment, was conducted in co-operation with a primary care doctor and a social worker. The latter managed to convince Pepe’s other son and a granddaughter to support him more actively. A medication review was performed and the family received training on medication management, handling oxygen therapy and inhalers and on identifying early signs of disease exacerbation.

Thanks to the care plan, Pepe now receives regular home visits from his nurse and primary care doctor and hospital-at-home services when needed. The community-based manager stays in touch with him by phone, with Pepe and his family now handling day to day care. Exacerbations have occurred less often and are managed by the primary care team. Pepe has not been to the hospital for six months.

Acknowledgements: This article is based on work by the International Expert Working Group on Patients with Complex Needs, supported by a grant from the Commonwealth Fund. The authors would like to thank Juan Gallud at the Regional Health Authority of

Valencia for providing information about the Chronic Care Strategy. Any errors and omissions are the sole responsibility of the authors.

References

- Barnett K, Mercer SW, Norbury M, Watt G, Wyke S, Guthrie B (2012), Epidemiology of multimorbidity and implications for health care, research, and medical education: a cross-sectional study, *Lancet* 380(9836):37–43 <http://www.sciencedirect.com/science/article/pii/S0140673612602402?via%3Dihub>
- Blumenthal D, Anderson G, Burke S, Fulmer T, Jha AK, Long P (2016), Tailoring Complex-Care Management, Coordination and Integration for High-Need, High-Cost Patients. A Vital Direction for Health and Health Care <https://nam.edu/tailoring-complex-care-management-coordination-and-integration-for-high-need-high-cost-patients-a-vital-direction-for-health-and-health-care/>
- Koné Pefoyo AJ, Bronskill SE, Gruneir A, Calzavara A, Thavorn K, Petrosyan Y, et al. (2015), The increasing burden and complexity of multimorbidity, *BMC Public Health* 15(1):415 <https://www.ncbi.nlm.nih.gov/pubmed/25903064>
- The Commonwealth Fund International Expert Working Group on Patients with Complex Needs (2017), Designing a High-Performing Healthcare System for Patients with Complex Needs: Ten Recommendations for Policymakers, Paris: OECD Policy Forum on the Future of Health <http://www.commonwealthfund.org/Publications/Other/2017/Ten%20Recommendations>
- McWilliams JM., “Cost Containment and the Tale of Care Coordination”, *New England Journal of Medicine* 375(23): 2218–20 <http://www.nejm.org/doi/full/10.1056/NEJMp1610821>