

The unfulfilled potential of primary care in Europe

The Alma-Ata Declaration's compelling vision will not be realised until we take community-level prevention seriously

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Community-level prevention in primary care

This week, on the 40th anniversary of the Alma-Ata Declaration on primary health care,¹ world leaders are gathered in Astana to renew their commitment to ‘health for all’. Whilst primary health care is about much more than primary care services, getting this element right is crucial to supporting the overarching principles of equity, population-level primary prevention, and proactive action on the social determinants of health. In the context of increasing chronic multimorbidity and ageing populations this article considers why European primary care has broadly failed to engage with the proactive prevention-oriented approach, and what needs to change today.

Contemporary challenges in primary care

Primary care has been defined as “first-contact, continuous, comprehensive, and coordinated care provided to populations undifferentiated by gender, disease, or organ system.”² A stronger primary care sector is associated with greater equity and better health outcomes, and in some settings lower overall costs.^{3,4} Primary care can manage 90% of all health system interactions, making it centrally important for the realisation of Universal Health Coverage.^{5,6} Over recent decades, improvements in primary care quality and coverage have delivered significant population health gains around the world.^{3, 7-12}

Primary care teams are commonly led by family doctors (also known as GPs or FPs); physicians who have received post-graduate specialty training to provide comprehensive family- and community-oriented medical care. In recent decades they have come under pressure from substantial increases in workload, including paperwork and delegation of tasks from hospitals to the community setting.^{6,13} Task-shifting to primary care is often wholly appropriate, however reallocation of responsibility is rarely followed by adequate reallocation of resources.¹³ Primary care teams have been on the front lines of this century’s major demographic and epidemiological challenges including ageing, socio-economic inequalities, chronic diseases, rising consultation rates, and multi-morbidity.¹³⁻¹⁵ The future sustainability of our health systems is dependent on primary care successfully meeting increased need with affordable, person-centred, high-quality care.

By shifting the emphasis of primary care from treatment towards proactive care, prevention, and health promotion at the local population level, it may be possible to address health challenges at an earlier stage.

This idea is not new, in fact it is the central thesis of the Alma Ata Declaration that set out to distinguish 'primary health care' (Box 1) from care oriented around sickness i.e. the status quo. Moving towards primary health care requires the collective actions of policy makers, communities, and many different health professionals, however the primary care sector is uniquely invested with the legitimacy and authority to lead this change.

Box 1: Article VII of the 1978 Alma Ata Declaration

Primary health care:

1. Reflects and evolves from the economic conditions and sociocultural and political characteristics of the country and its communities and is based on the application of the relevant results of social, biomedical and health services research and public health experience;
2. Addresses the main health problems in the community, providing promotive, preventive, curative and rehabilitative services accordingly;
3. Includes at least: education concerning prevailing health problems and the methods of preventing and controlling them; promotion of food supply and proper nutrition; an adequate supply of safe water and basic sanitation; maternal and child health care, including family planning; immunization against the major infectious diseases; prevention and control of locally endemic diseases; appropriate treatment of common diseases and injuries; and provision of essential drugs;
4. Involves, in addition to the health sector, all related sectors and aspects of national and community development, in particular agriculture, animal husbandry, food, industry, education, housing, public works, communications and other sectors; and demands the coordinated efforts of all those sectors;
5. Requires and promotes maximum community and individual self-reliance and participation in the planning, organization, operation and control of primary health care, making fullest use of local, national and other available resources; and to this end develops through appropriate education the ability of communities to participate;
6. Should be sustained by integrated, functional and mutually supportive referral systems, leading to the progressive improvement of comprehensive health care for all, and giving priority to those most in need;
7. Relies, at local and referral levels, on health workers, including physicians, nurses, midwives, auxiliaries and community workers as applicable, as well as traditional practitioners as needed, suitably trained socially and technically to work as a health team and to respond to the expressed health needs of the community.

Whereas primary care systems are currently configured around sequentially consulting unwell individuals, the move to primary health care requires a proactive population approach. Population-level interventions¹⁶ address environmental risk factors as well as social and economic determinants of health. Community-level interventions include investment in green spaces, housing, active transport networks, smoke-free zones, traffic calming measures, and local licencing and zoning

regulations. Many practices are taking first steps towards addressing social determinants via social prescribing. However, it is important to recognise that this is an individual-level approach rather than seeking to influence structural determinants that impact whole subpopulations.

Policymakers may be reluctant to invest in pivoting systems towards population-level prevention for a long list of reasons. It is much easier to blame individuals for making poor lifestyle choices than it is to change the environment; prevention and health system reforms require upfront political and capital investment but the benefits are invariably conferred to political successors; it is hard to take credit for things that haven't happened (such as deaths averted); and it is difficult to obtain robust evidence for the effectiveness of population-level interventions within the current evidence paradigm. Policymakers also face complex trade-offs between investing in prevention vs other elements of the universal health coverage and primary health care agendas such as improving access to services.

Structural determinants

In many European countries the remit of primary care only extends as far as diagnosing and treating disease in individuals (and only those with the means and motivation to seek care).¹⁸ Although patients may be opportunistically screened for hypertension or offered smoking cessation, there is often no systematic approach to engaging with the broader health determinants at the community level.¹⁹

This is a lost opportunity. In concert with public health teams, primary care teams are well positioned to identify the local drivers of morbidity and mortality in local settings, including active transport, the food environment, pollution, poverty, early years education, housing, road safety, exercise spaces, and the availability and affordability of alcohol and tobacco. These non-medical factors are responsible for up to 90% of health outcomes.²⁰ Primary care teams see these local-level social determinants at work on a daily basis²¹ and have overlapping moral, professional, and (where they are paid by capitation) financial interests in addressing local social determinants.

Through collaboration with public health, social care, and other community actors, primary care professionals are uniquely placed to translate their insights into priority actions for community-level prevention. Primary care teams have detailed patient datasets, a unique eco-biopsychosocial perspective, and often develop a high stock of community trust and a rich ethnographic understanding of the local population.²² Although the Alma Ata Declaration called for proactive population-level activity to become the central organising activity of primary health care, teams that operate this way remain rare.

Restricted remit

Early general practitioners like William Pickles felt responsible for population- and individual-level practice,²³ but the role of contemporary primary care teams is much more narrow in many European countries^{11,24-26} Sutchfield and colleagues argue that an overemphasis on specialisation and the evolving professionalisation of primary care and public health as distinct specialities over the course of the 20th century led to the eschewal of public health roles.²⁷ Primary care came to focus more on individual-level biomedical curative services and developed its own set of definitions around population health.²⁸ Recent efforts to bring the two isolated specialities back into alignment has been under-resourced and often met resistance from powerful doctors' organisations.²⁹

Financing has also played a large role. Once-ubiquitous fee-for-service systems can lead to the underuse of preventive services.^{30,31} it is difficult to make people contribute to action on the social determinants as the benefits fulfil the criteria of a public good (non-rival and non-excludable).³² The international move to capitation has helped provide capital for investment in primary prevention at the community level, but increasing individual-level complexity often seems to absorb any additional money, as in the UK.^{13,33} Governments tend to finance public health and primary care functions separately, and insurance companies have been very reluctant to pay for community-level prevention delivered through primary care.³⁴ The degree to which primary care teams engage with even basic individual-level preventive activity varies widely across Europe, with variation underpinned by differing financing arrangements.^{11,24,35,36} Experience from other continents demonstrates that state regulators often restrict the practice of primary care professionals to individual-level functions and disproportionately direct regulatory measures to public sector practices (that are more likely to address public health issues).^{8,37}

Anecdotally, our primary care colleagues feel that social determinants simply aren't their responsibility, even though they appreciate that they have 'skin in the game'. And can we blame them when modern primary care teams are not trained, paid, held accountable, or given time for delivering community-level prevention?³⁸

Realising the potential of primary care

We have argued that European primary care teams are well-positioned to assess and address structural determinants of health at the community level but what does this look like in practice?

The Hedena Health GP practice in Oxford has worked with housing developers, the city council, public health teams, and NHS England to develop a health-promoting housing development in a deprived area. The 'healthy new town' gives primacy to cyclists, pedestrians and public transport, as well as focusing on social inclusion, safe housing, and the food environment.^{39,40}

In Belgium, the Botermarkt Community Health Centre in Ghent has led a number of preventive initiatives prompted by assessment of the local population's health needs. These have included leading a coalition of community stakeholders to redesign a dangerous road section and successfully lobbying the council for a new playground. These activities have helped to reduce road traffic injuries and address childhood obesity.^{22,41}

'Deep end' GP practices in Glasgow & Clyde work closely with members of the local community to assess and address local drivers of disease through initiatives like walking groups, financial advice, community gardens, and supporting the reforestation of disused land. Recognising that addressing social issues can reduce demand by improving health outcomes, the Drumchapel surgery closes one afternoon per month to train staff in this area.^{42,43}

Primary care professionals in the Dutch city of Utrecht work with social workers and lay support groups to deliver a city-wide program that proactively supports frail elderly people, identified using routine primary care data.⁴⁴

System recalibration

Certain conditions are required to facilitate this style of working, starting with financing. The aforementioned Botermarkt practice successfully lobbied for capitated payment which they used to employ a community health worker to engage with issues like housing, playgrounds, street lighting, food availability, and active transport.^{22,45} England and Estonia's quality bonus schemes could be modified to incentivise action at the local population level. Moving away from fee-for-service and towards mixed payment models that include population-based weighted capitation is important for sustainability and incentivizing population-based practice.^{22,46,47} Even more important is ensuring that the primary care is adequately financed. Even in countries like the UK where primary care is well

developed and delivers over 90% of all health system interactions, primary care only receives around 10% of government health spending.⁴⁸

Empanelment is a second prerequisite as primary care teams need to know who they are serving and the characteristics of their patient population.⁴⁹ Staff also need better training on how to identify and address social determinants, complemented with easy access to public health specialists. Deeper integration can be achieved through co-location, regular meetings, and shared information systems, work plans, and budgets.³³ Qualitative and quantitative primary care data should be used routinely to develop public health interventions.⁵⁰

Scotland⁵¹ and Catalonia⁵² have tried to improve the coordination of multiple health and social care services around the needs of patients and populations. This integrated working allows primary care teams to engage directly with agencies working on social determinants of health.⁵³

Finally, a cultural shift is required within modern medicine, from specialist hospital treatment to community-led prevention and care. The NHS Five Year Forward View⁵⁴ and Astana Declaration⁵⁵ are good examples of policy-level commitment to prevention-oriented care. Doctors associations carry enormous weight and will need to catch the vision of what primary care can accomplish for patients when sphere of concern enlarges to encompass more than what happens in consultation rooms. Box 2 outlines a few further suggested enablers of reform.

A small but central role

Primary care teams provide invaluable individual-level medical care that will always be required. However, they are also well positioned to help identify and influence the local social determinants that make their patients ill. Given that primary care workers are not currently trained, paid, or managed to think about community-level drivers of disease, it is not surprising that this approach is rare. This week policymakers are talking the talk; recommitting to orienting health systems around proactive prevention. Introducing empanelment, population-weighted capitation, enhanced training, unified budgets, and intersectoral working arrangements would show that they are willing to walk the walk.

Box 2: Enablers of primary care reform

| Actors | Proposed Actions |
|---------------|--|
| Policymakers | <p>Governance</p> <ul style="list-style-type: none"> • Health in all policies • Intersectoral collaboration and coordination • Merging of health and social sectors • Align professional health curricula towards skill gaps <p>Financing</p> <ul style="list-style-type: none"> • Ear-marked funding for population-level prevention activity • Strategic purchasing – mixed payment models that include population-based weighted capitation • Allocate resources for transformation in operations <p>Monitoring and Evaluation</p> <ul style="list-style-type: none"> • Performance management – devising financial and non-financial incentives and key performance indicators aligned with overall health system goals • Accountability – holding primary care teams accountable for delivering activities <p>Enabling Environment</p> <ul style="list-style-type: none"> • Seeking out and disseminating examples of best practice • Lowering barriers to safe innovation through accountability structures and payment mechanisms that prioritise outcomes over processes. |
| Managers | <ul style="list-style-type: none"> • Commissioning and managing local services • Training human resources • Building and maintaining relationships with community stakeholders • Convening stakeholders • Data analysis and performance management • Routine reporting to providers on the health status of their population • Improving the financial and human resources allocated to health promotion and disease prevention |
| Practitioners | <p>Working with public health and community members</p> <ul style="list-style-type: none"> • Monitoring population health status • Surveying risks and threats to public health • Identifying local social determinants of health • Risk stratifying the population • Developing appropriate interventions • Delivering these interventions • Monitoring and evaluating interventions with community involvement |

Key messages

1. The celebrated 1978 Alma-Ata Declaration called for a shift in focus from reactively managing sick individuals to 'primary health care': proactive prevention and health promotion at the community level.
2. As health need is increasingly characterised by chronic multimorbidity and rising demand, preventive action has never been more pertinent, yet the Alma Ata vision remains unrealised.
3. Most primary care systems constrain rather than facilitate engagement with local public health teams, communities, and initiatives to address social determinants.
4. Primary care financing, training, organisational structures, and incentives can and should be better aligned with proactive community-level prevention.

Provenance

This manuscript was conceived by LA who drafted the original manuscript. SB, JDM, CVW, HK, NDW, and TG provided feedback, revised subsequent manuscripts, and reviewed the final version. AH and MB provided comments on the first draft. KS is a patient representative who reviewed the draft manuscript and provided comments for the final version.

LA is a GP academic clinical fellow at Oxford University, a WHO consultant working on primary care and public health, and an editorial board member at the British Journal of General Practice. SB is leading the WHO preparations for the Alma Ata renewal. Professor JDM is the chair of the European Commission's Expert Panel on Effective Ways of Investing in Health, former head of Ghent University's Department of Family Medicine and Primary Health Care, and Director of the International Centre for Primary Health Care and Family Medicine at Ghent University. Professor CVW has served on the Lancet international advisory board and as the president of the World Organisation of Family Doctors (WONCA) from 2007-2010. HK is a senior director at WHO Europe working on health systems and public health. Professor NDW heads the Department of Primary Care at University Medical Centre Utrecht and has held a number of senior international advisory roles. Professor TG is a leading international primary care academic based at Oxford University.

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Declaration of Interests

We have read and understood BMJ policy on declaration of interests and declare that we have no competing interests

References

1. World Health Organization, UNICEF. Declaration of Alma-Ata International Conference on Primary Health Care, Alma-Ata, USSR, 6–12 September 1978.
2. Starfield B. Is primary care essential? *Lancet*. 1994 Mar 20;344(8930):1129–33.
3. Starfield B, Shi L, Macinko J. Contribution of Primary Care to Health Systems and Health. *Milbank Q*. 2005 Sep;83(3):457–502.
4. Kringos DS, Boerma W, van der Zee J, Groenewegen P. Europe's strong primary care systems are linked to better population health but also to higher health spending. *Health Aff (Millwood)*. 2013 Apr;32(4):686-94
5. Stigler FL, Macinko J, Pettigrew LM, Kumar R, van Weel C. No universal health coverage without primary health care. *Lancet*. 2016;387(10030):1811.
6. Hobbs F, Bankhead C, Mukhtar T, Stevens S, Perera-Salazar R, Holt T, et al. Clinical workload in UK primary care: a retrospective analysis of 100 million consultations in England, 2007-14. *Lancet*. 2016;387(10035):2323–30.
7. Caley M. Remember Barbara Starfield: primary care is the health system's bedrock. *BMJ* 2013;347:f4627
8. van Weel C, Kassai R, Qidwai W, Kumar R, Bala K, Prasad Gupta P, et al. Primary healthcare policy implementation in South Asia. *BMJ Glob Heal*. 2016;1(2):e000057.
9. Rohde J, Cousens S, Chopra M, Tangcharoensathien V, Black R, Bhutta ZA, Lawn JE. 30 years after Alma-Ata: has primary health care worked in countries? *The Lancet*. 2008 Sep 13;372(9642):950-61.
10. Macinko J, Starfield B, Shi L. The contribution of primary care systems to health outcomes within Organization for Economic Cooperation and Development (OECD) countries, 1970-1998. *Health Services Research*. 2003;38(0017–9124):831–65.
11. Kringos D, Boerma W, Hutchinson A, Saltman RB. Building primary care in a changing Europe. *Eur Obs Heal Syst Policies*. 2015;(Observatory Studies Series 38):172.
12. Schäfer WLA, Boerma WGW, Kringos DS, De Ryck E, Greß S, Heinemann S, et al. Measures of quality, costs and equity in primary health care instruments developed to analyse and compare primary care in 35 countries. *Qual Prim Care*. 2013;21(2):67–79.
13. Baird B, Charles A, Honeyman M, Maguire D, Das P. Understanding pressures in general practice. *King's Fund* [Internet]. 2016;(May):97. [cited 2018 Oct 21]. Available from: https://www.kingsfund.org.uk/sites/default/files/field/field_publication_file/Understanding-GP-pressures-Kings-Fund-May-2016.pdf <https://www.kingsfund.org.uk/publications/pressures-in-general-practice> <https://www.kingsfund.org.uk/sites/files/kf/field/> [Accessed 25/08/2018]

14. Barnett K, Mercer SW, Norbury M, Watt G, Wyke S, Guthrie B. Epidemiology of multimorbidity and implications for health care, research, and medical education: a cross-sectional study. *The Lancet*. 2012 Jul 7;380(9836):37-43.
15. Crisp N, Stuckler D, Horton R, Adebawale V, Bailey S, Baker M, Bell J, Bird J, Black C, Campbell J, Davies J. Manifesto for a healthy and health-creating society. *The Lancet*. 2016 Dec 10;388(10062):e24-7.
16. Rose G. Sick individuals and sick populations. *Int J Epidemiol*. 1985;14(1):32–8.
17. Rutter H, Savona N, Glonti K, Bibby J, Cummins S, Finegood DT, Greaves F, Harper L, Hawe P, Moore L, Petticrew M. The need for a complex systems model of evidence for public health. *The Lancet*. 2017 Dec 9;390(10112):2602-4.
18. World Health Organization. 2008 World Health Report: Primary care: now more than ever [Internet]. Geneva: WHO; 2008. [cited 2018 Oct 21]. Available from: http://www.who.int/whr/2008/whr08_en.pdf
19. Marmot M, Health. Closing the gap in a generation: health equity through action on the social determinants of health. Final report of the Commission on Social Determinants of Health. *Glob Public Health*. 2008;420.
20. Health Policy Brief: The Relative Contribution of Multiple Determinants to Health Outcomes," *Health Affairs*, August 21, 2014.
21. Senior T. How chronic diseases thrive. *Br J Gen Pract*. 2018 Aug 1;68(673):387.
22. de Maeseneer J. Family medicine and primary care: At the Crossroads of Societal Change. Tiel: Lannoo campus; 2017.
23. Pickles WN. Epidemiology in country practice. Bristol: John Wright & Sons; 1939.
24. Pelone F, Kringos DS, Spreeuwenberg P, De Belvis AG, Groenewegen PP. How to achieve optimal organization of primary care service delivery at system level: lessons from Europe. *International journal for quality in health care*. 2013 Feb 13;25(4):381-93.
25. de Waard AM, Hollander M, Korevaar JC, Nielen MMJ, Carlsson AC, Lionis C, Seifert B, Thilsing T, de Wit NJ, Schellevis FG; SPIMEU Project Group . Selective prevention of cardiometabolic diseases: activities and attitudes of general practitioners across Europe. *Eur J Public Health*. 2018 Jul 16.
26. World Health Organization. 2008 World Health Report: Primary care: now more than ever [Internet]. Geneva: WHO; 2008. Available from: http://www.who.int/whr/2008/whr08_en.pdf
27. Scutchfield FD, Michener JL, Thacker SB. Are we there yet? Seizing the moment to integrate medicine and public health. *American journal of public health*. 2012 Jun;102(S3):S312-6.
28. Gourevitch, M.N., Cannell, T., Boufford, J.I., and Summers, C. The challenge of attribution: responsibility for population health in the context of accountable care. *Am J Prev Med*. 2012; 42: S180–S183dx.doi.org/10.1016/j.amepre.2012.03.012

29. Koo D, Felix K, Dankwa-Mullan I, Miller T, Waalen J. A call for action on primary care and public health integration.
30. Sebo P, Cerutti B, Fournier JP, Rat C, Rougerie F, Senn N, Haller DM, Maisonneuve H. How do general practitioners put preventive care recommendations into practice? A cross-sectional study in Switzerland and France. *BMJ open*. 2017 Oct 1;7(10):e017958.
31. National Institutes of Health. Changing Landscape: From Fee-for-Service to Value-Based Reimbursement. 2018. [cited 2018 Oct 21]. Available from: <https://www.niddk.nih.gov/health-information/communication-programs/ndep/health-professionals/practice-transformation-physicians-health-care-teams/why-transform/changing-landscape-fee-service-value-based-reimbursement>
32. Nichols LM, Taylor LA. Social Determinants As Public Goods: A New Approach To Financing Key Investments In Healthy Communities. *Health Affairs*. 2018 Aug 1;37(8):1223-30.
33. Allen L. Leveraging primary care to address social determinants. *The Lancet Public Health*. 2018 Oct 1;3(10):e466.
34. De Maeseneer J, Willems S, De Sutter A, Van de Geuchte I, Billings M. Primary health care as a strategy for achieving equitable care: a literature review commissioned by the Health Systems Knowledge Network. 2007. [cited 2018 Oct 21]. Available from: <https://biblio.ugent.be/publication/396406>
35. Kringos D, Boerma W, Bourgueil Y, Cartier T, Dedeu T, Hasvold T, Hutchinson A, Lember M, Oleszczyk M, Pavlic DR, Svab I. The strength of primary care in Europe: an international comparative study. *Br J Gen Pract*. 2013 Nov 1;63(616):e742-50.
36. de Waard AM, Wändell PE, Holzmann MJ, Korevaar JC, Hollander M, Gornitzki C, de Wit NJ, Schellevis FG, Lionis C, Søndergaard J, Seifert B, Carlsson AC; SPIMEU Research Group. Barriers and facilitators to participation in a health check for cardiometabolic diseases in primary care: A systematic review. *Eur J Prev Cardiol*. 2018 Aug;25(12):1326-1340
37. van Weel C, Alnasir F, Farahat T, Usta J, Osman M, Abdulmalik M, Nashat N, Alsharief WM, Sanousi S, Saleh H, Tarawneh M. Primary healthcare policy implementation in the Eastern Mediterranean region: Experiences of six countries. *European Journal of General Practice*. 2018 Jan 1;24(1):39-44.
38. Primary Health Care Performance Initiative. The measurement gap. [cited 2018 Oct 21]. Available from: <https://phcperformanceinitiative.org/about-us/measuring-phc>
39. Grosvenor Developments Ltd. Health new towns: Barton Park. [cited 2018 Oct 21]. Available from: <http://www.oxfordshireccg.nhs.uk/documents/localities/oxford-city/documents/barton-healthy-new-town-presentation.pdf>
40. NHS England. Barton [Internet]. [cited 2018 Oct 21]. Available from: <https://www.england.nhs.uk/ourwork/innovation/healthy-new-towns/barton-park/>

41. De Roo L, De Maesenner J. Community Health Centre Botermarkt: 35 years of implementation of the Alma Ata Declaration! [cited 2018 Oct 21]. Available from: http://www.wgcbotermarkt.be/eng/sites/default/files/35%20years%20of%20implementation%20of%20the%20Alma%20Ata%20Declaration_0.pdf
42. Watt G. General Practitioners at the Deep End: The experience and views of general. Vol. 89, Occasional Paper of Royal College of General Practice. 2012.
43. GPs at the Deep End. Deep End Report 32: 8 years of the Deep End Project. 2017. [cited 2018 Oct 21]. Available from: https://www.gla.ac.uk/media/media_557259_en.pdf
44. NOEL. Nijmegen region on the same line (NOEL) [Dutch]. 2018. [cited 2018 Oct 21]. Available from: <https://www.regionijmegenopeenlijn.nl/>
45. Allen L. Primary care 2.0. PLoS Global Health Blog. October 9 2018. [Internet]. [cited 2018 Oct 21]. Available from: <https://blogs.plos.org/globalhealth/2018/10/primary-care-2-0/>
46. Sessums LL, Conway PH. Saving Primary Care. JAMA internal medicine. 2017 Nov 1;177(11):1560-2.
47. OECD Health Policy Studies. Better Ways to Pay for Health Care. Paris: OECD Publishing; 2016.
48. British Medical Association. Funding General Practice in England. September 2017. [cited 2018 Oct 21]. Available from: <file:///C:/Users/User/Downloads/Funding-general-practice-in-England190917.pdf>
49. Grumbach K, Olayiwola JN. Patient empanelment: the importance of understanding who is at home in the medical home. The Journal of the American Board of Family Medicine. 2015 Mar 1;28(2):170-2.
50. Murray SA, Tapson J, Turnbull L, McCallum J, Little A. Listening to local voices: Adapting rapid appraisal to assess health and social needs in general practice. BMJ. 1994;308(6930):698.
51. Bruce D, Parry B. Integrated care: A Scottish perspective. London J Prim Care. 2015;7(3):44–8.
52. Contel JC, Ledesma A, Blay C, Mestre AG, Cabezas C, Puigdollers M, Zara C, Amil P, Sarquella E, Constante C. Chronic and integrated care in Catalonia. International journal of integrated care. 2015 Jun 29;15(2).
53. van Weel C, De Maeseneer J, Roberts R. Integration of personal and community health care. Lancet. 2008;372(9642):871–2.
54. NHS England. Five Year Forward View. [cited 2018 Oct 21]. Available from: <https://www.england.nhs.uk/wp-content/uploads/2014/10/5yfv-web.pdf>
55. World Health Organization. Declaration of Astana [draft]. [cited 2018 Oct 21]. Available from: http://www.who.int/primary-health/conference-phc/DRAFT_Declaration_on_Primary_Health_Care_28_June_2018.pdf