Editorial

Integrated Healthcare

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INTRODUCTION

"We have to move away from fragmentation to a much more coordinated system."

Kristina Stevens[1]

'Integrated care' is primarily coined as a term to improve patient experience and achieve better effectiveness in a comprehensive health network. The idea is to nullify the fragmentation in services provided to patients, and facilitate better organised and more uninterrupted care, particularly for advancing age population having a high prevalence of chronic diseases.[2]

The King's Fund, a self-regulating charity operating to improve health and care in England, has formulated various reports and publications detailing various aspects of integrated care.[3] Ideally, the holistic integrated care systems comprehensively control the funding and performance with less influence of national regulators (Figure 1).

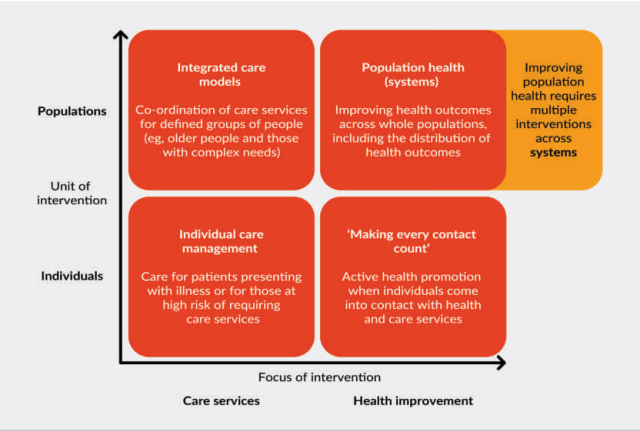

Figure 1: "The Focus of Population Health Systems"[4]

World Health Organisation Framework on integrated people-centred health services (IPCHS) deliberates extensively of the need and requirement globally. Integrated people-centred health arrangements place people and communities, not diseases, at the core of health systems. Evidence proves that healthcare systems focused around the requirements of the population, people and communities, are more effectual, less costly and are superior organised to respond to health crises (Figure 2).[5]

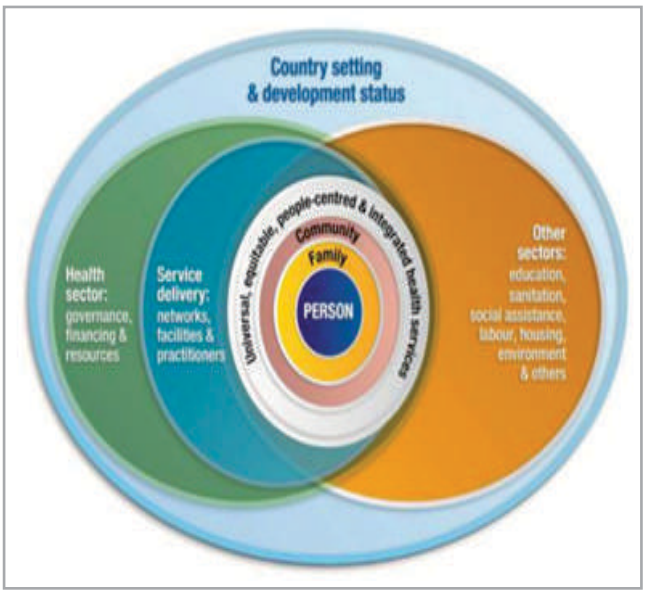

Figure 2: "Conceptual Framework – IPCHS"[5]

The Framework on integrated people-centred health services guides for a principle change how the health services are financed and delivered. It aids countries advancement towards universal health coverage by reorienting the focus from health systems planned around diseases and healthcare establishments towards health systems devised for individuals in population.[6]

Providing integrated care – care that is not limited to confines of primary, community, hospital and social care – should be a goal of health systems worldwide. Canterbury, New Zealand, having some likenesses to many domains of United Kingdom, undertook a journey towards integrated care with very promising results.[2]

Integrated health and social care system, services work around the essentials of patients. The central and unifying concept is to achieve 'one system, one budget'.[7] This illustration shows the patient and their home at the heart of the system (Figure 3).

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Figure 3: "Pictogram of the Health Care System in Canterbury"[2]

MULTI-MORBIDITY/CO-MORBIDITY–NONCOMMUNICABLE DISEASES (NCDs)

World Health Organisation in its GLOBAL STATUS REPORT on noncommunicable diseases 2014 stresses the Noncommunicable diseases (NCDs) as the major health challenge of the 21st century. It is the cause of significant burden on the socioeconomic framework of countries vis-a-vis human suffering, in particular, affecting low and middle-income countries. Governments can't ignore the increase in the population of incidence of NCDs. Unless evidence-based concrete measures are implemented, the human, social and economic costs of NCDs continue to grow and overcome the capacity of countries to tackle them.[8]

Noncommunicable diseases (NCDs), including heart disease, stroke, cancer, diabetes and chronic lung disease, are collectively responsible for almost 70% of all deaths worldwide. Almost 75% of all NCD deaths, and 82% of the 16 million people who died prematurely, or before reaching 70 years of age, occur in low and middle-income countries. According to the World Health Organisation Fact Sheet on NCDs, updated June 2017:

Noncommunicable diseases (NCDs) cause of 40 million deaths each year, corresponding to 70% of all-cause mortality worldwide.

Between the ages of 30 and 69 years, 15 million deaths from an NCD are documented; 80% plus of these "premature" deaths occur in low and middle-income countries.

Cardiovascular diseases are responsible for most NCD deaths, 17.7 million people annually, followed by cancers (8.8 million), respiratory diseases (3.9 million), and diabetes (1.6 million).[9]

Data extrapolated for United Kingdom into infographics (Figure 4 & 5) and tables (Table 1, 2 & 3):

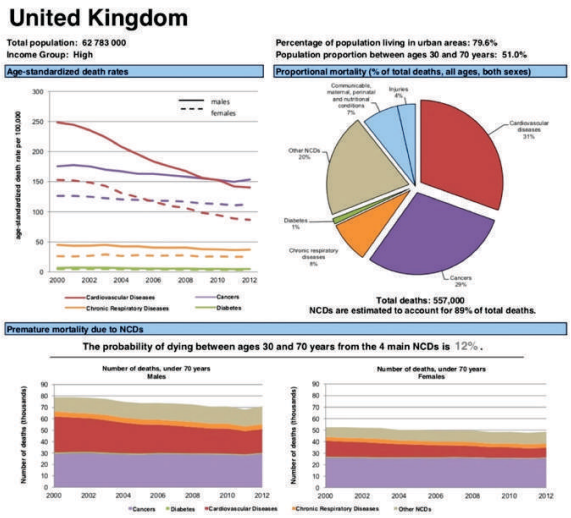

Figure 4: "NCD Country Profile"[8]

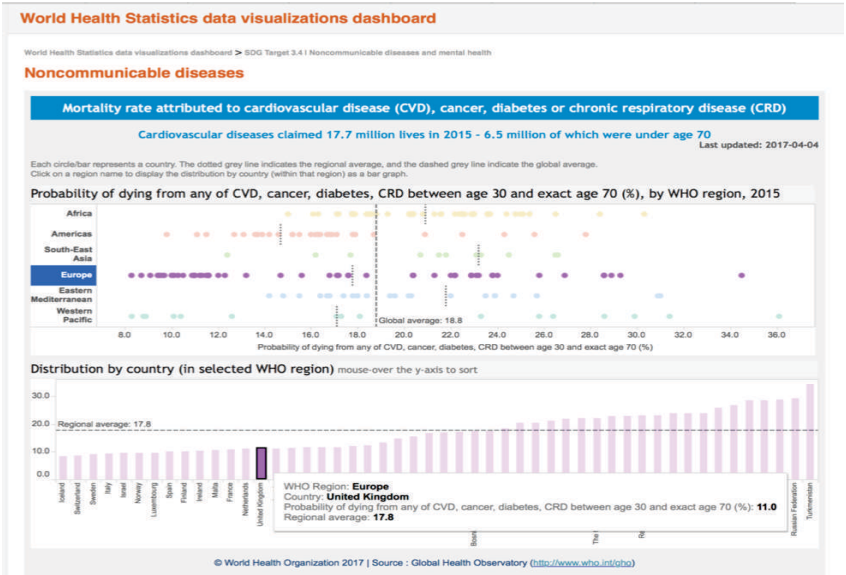

Figure 5: "Mortality Rate Attributed to CVD, Cancer, Diabetes or CRD"[9]

Table 1: "Total NCD Mortality"[9]

		Noncommunicable diseases					
		Age-standardized mortality rate by cause (per 100 000 population)			Total NCD Deaths (in thousands)		
Country	year	Both sexes	Male	Female	Both sexes	Male	Female
United Kingdom of Great Britain and Northern Ireland	2015	350.7	408.0	301.6	513.1	249.0	264.1
	2010	376.9	446.4	318.9	501.0	242.0	259.0
	2005	419.2	504.2	351.6	513.9	245.8	268.2
	2000	450.6	555.8	371.4	516.3	248.5	267.7

Table 2: "NCD Mortality Under Age of 70 Years"[9]

		NCD deaths under age 70 (percent of all NCD deaths)		
Country	year	Both sexes	Male	Female
United Kingdom of Great Britain and Northern Ireland	2015	22	27	18
	2010	24	29	19
	2005	24	30	19
	2000	25	32	20

Multi-morbidity is classically defined as more than two illnesses in an individual expressing and effecting simultaneously. In advanced age, multi-morbidity increases considerably in population. There are 20% of the British population (4 million people) having multi-morbidity, with an estimated additional rise of 37% in the England and Wales population over 50 years of age by the year 2031.[10]

Table 3: "Probability of Dying between exact Ages 30 and 70 from any of Cardiovascular Disease, Cancer, Diabetes, or Chronic Respiratory (%) Global vs the United Kingdom"[9]

	Probability (%) of dying between age 30 and exact age 70 from any of cardiovascular disease, cancer, diabetes, or chronic respiratory disease[i]							
	year		Male			female		
WHO region	2015	2010	2005	2000	2015	2010	2005	2000
(WHO) Global	22.0 [21.4-22.7]	32.2 [22.6-23.7]	34.8 [24.2-25.4]	26.5 [25.9-27.1]	15.5 [15.0-17.1]	16.4 [16.0-16.9]	17.7 [17.2-18.2]	18.9 [18.4-19.4]

		Probability (%) of dying between age 30 and exact age 70 from any of cardiovascular disease, cancer, diabetes, or chronic respiratory disease[i]		
Country	year	Both sexes	Male	Female
United Kingdom of Great Britain and Northern Ireland	2015	11.0 [10.6-11.5]	13.0 [12.5-13.5]	9.1 [8.8-9.5]
	2010	12.4 [11.9-12.8]	14.8 [14.3-15.4]	10.0 [9.6-10.4]
	2005	14.2 [13.7-14.7]	17.1 [16.5-17.8]	11.3 [10.9-11.8]
	2000	16.4 [15.9-17.0]	20.0 [19.3-20.8]	12.9 [12.5-23.4]

INTEGRATED FINANCE IN INTEGRATED CARE

The healthcare systems working on the principles of distinguishing between those who are "sick" from ones who are 'frail' typically represent the 'Berlin Wall" between health and social care systems. The truth is far from it as most need complex care including having chronic diseases and multiple morbidities. Ideally, such a setup is unsuitable and insufficient thus needing integration. The major barriers in the way of integration are primarily financial, as integrating funds and budgets are key to success.[11]

Mason et al. observed the potential impacts of integrated funding on integrated care are numerous for the patients, their families, service providers and the community as a whole. The emphasis is on financial integration as it facilitates integrated care.[11] The overall impact of integrating funding and care is summarized as Table 4.

Table 4: "The Potential Impacts of Integrated Funding on Integrated Care" [11]

POTENTIAL IMPACT	HOW MIGHT IT WORK?
Improve access to care	Integrated funds can facilitate access if they are used to ensure the supply of services matches clients' needs
Increase community care (health and social care)	Integrated funds can be used to purchase the right mix of community services, helping to prevent deteriorations in health/functioning and/or supporting rehabilitation and recovery following hospitalization
Reduce unplanned admissions and readmissions	Tailored packages of integrated care in the community, purchased through integrated funds, may help maintain health and functioning and avoid unplanned hospitalizations
Reduce total costs	Higher levels of expenditure in the community may reduce total costs if subsequent hospital and residential care use is reduced or averted
Improve outcomes	Individually tailored packages of care can maintain or even improve health status and functioning
Improve the quality of care	Poor quality health care may increase the costs of social care and vice versa, potentially increasing total costs. In the context of integrated budgets, all providers should have an incentive to ensure the quality of care is acceptable
Reduce the length of stay	Integrated funds can be used to assemble appropriate care packages to support timely discharge from acute care wards
Reduce residential care	Integrated funds can be used to provide services that support independent living in the community. For example, recovery, rehabilitation and reablement services may provide an alternative to long-term residential care following hospitalization
Improve patient and user experience of care	If integrated funds are successful in facilitating integrated care, the patient and user experience could improve

SELFIE 2020–A FRAMEWORK FOR INTEGRATED CARE FOR MULTI-MORBIDITY

SELFIE (Sustainable intEgrated chronic care modeLs for multi-morbidity: delivery, FInancing and performancE) is an EU project funded by Horizon2020. The structure focuses South Somerset Symphony Programme with an intention to develop person-centred care for patients with multi-morbidity. The aim is to design evidence-based, financially viable, integrated care programmes that encourage collaboration throughout health & social care. Strong support by apt funding and reimbursement arrangements is the clue.[12,13]

Figure 6 represents a conceptual framework for the delivery of care for persons with multiple chronic conditions.[13]

The framework is comprised of a core in which the individual with multi-morbidity and his or her environment is placed centrally. Concepts pertaining to integrated care for multi-morbidity are grouped at the micro, meso and macro levels. They are further split according to the six WHO components: service delivery, leadership governance, workforce, financing, technologies & medical products and information & research. Below, first, the core of the framework is described, where after each component, starting at the top and moving clockwise, is described at the micro, meso, and macro level. Lastly, the role of monitoring is described.[14-16]

Figure 6: "Conceptual Framework for the Delivery of Care for Persons with Multiple Chronic Conditions"[13,14]

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