



Health Literacy Redefined through Patient Engagement Framework

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Introduction

Today, Internet is competing with traditional Medicine. People go online to seek information for their wellbeing, look up treatment options or to find patients like them. Thus, patients' engagement in the healthcare system is becoming inevitable.

A Pew recent study showed that 72% of U.S. adults have searched online for health information in the past year and 35% went online to diagnose a condition (Fox & Duggan, 2013). This has the potential to reshape patient-physician relationship and eventually the health care delivery at large.

The government, recognizing the emerging role of patients, has launched an initiative that foster patient engagement, the "Patient Engagement Framework", where patients are invited to a new era of health care where they become partners instead of "patients." The Patient Engagement Framework (PEF) provides an excellent approach for healthcare providers to gradually engage patients using e-health resources and thus improve outcomes in terms of quality, safety and costs while meeting Meaningful Use criteria.

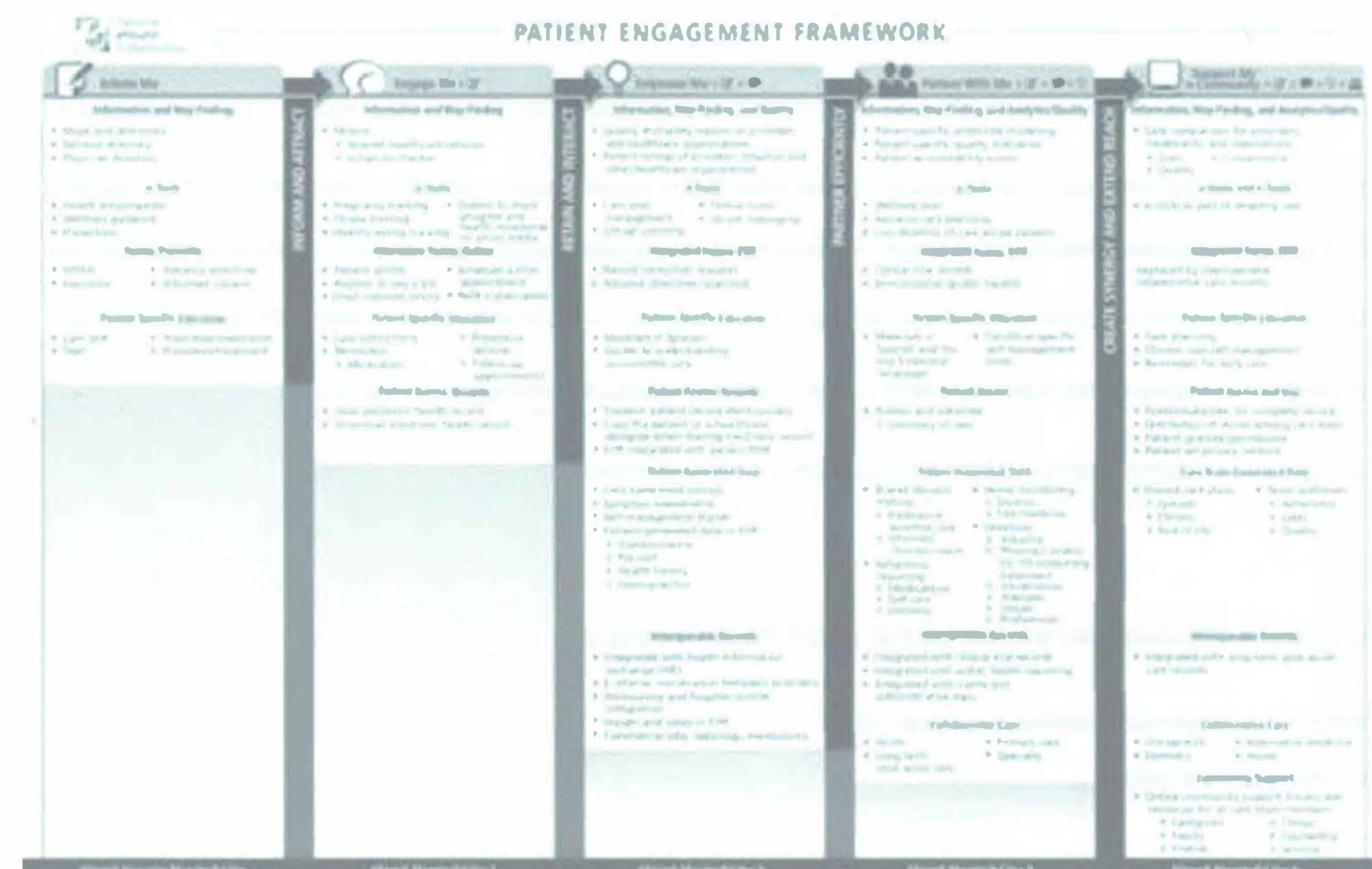


Figure 1: Patient Engagement Framework

Problem

A main barrier to engage patients is the limited health literacy skills for the majority of the patients. Only 12% of the American adults are proficient health literate (Kutner, Greenberg, Jin, Paulsen, & White, 2006).

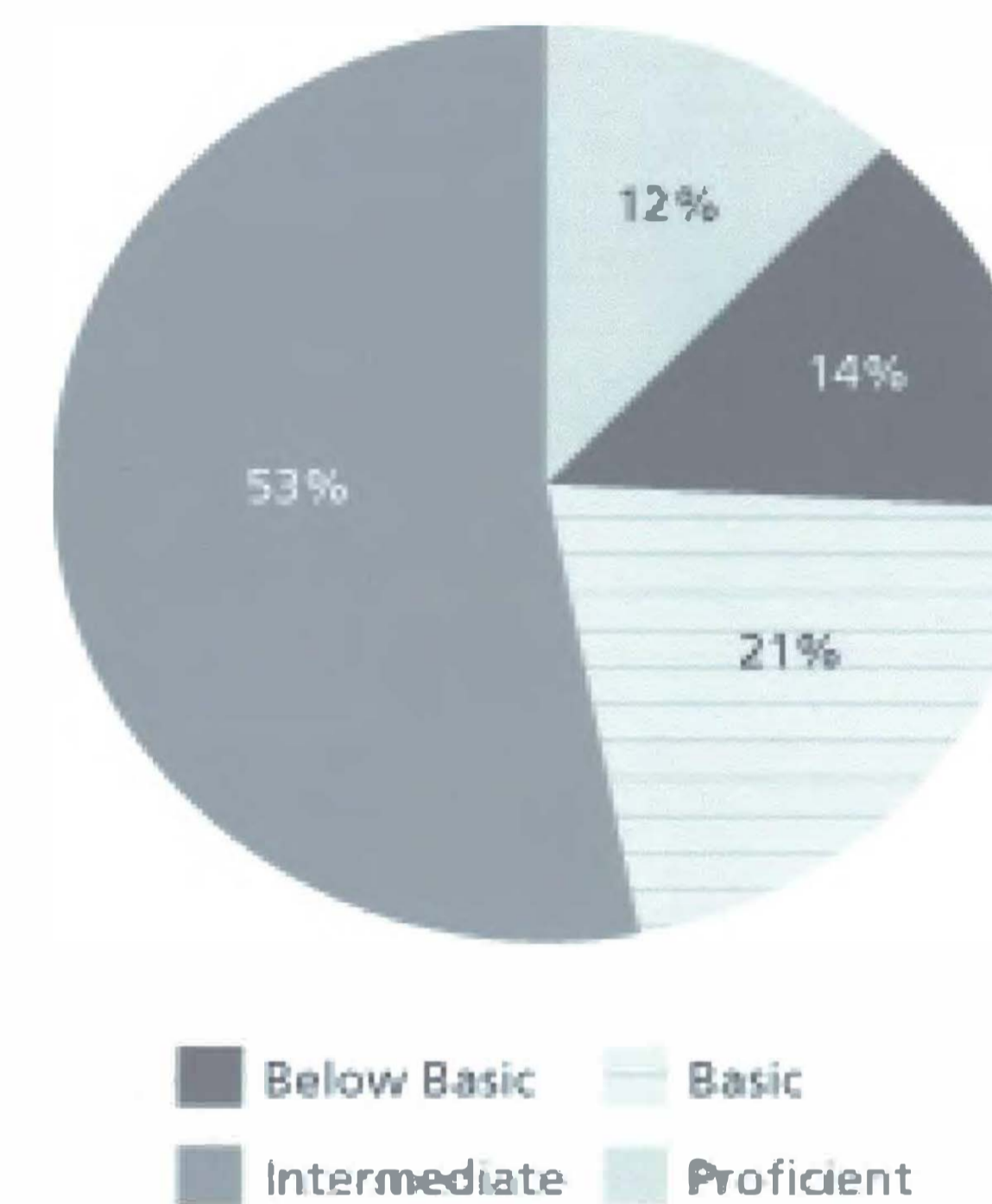


Figure 2: Percentage of Adults in Each Health Literacy level

Literacy Types

Type	Description
Visually literate	able to understand graphs or other visual information
Computer literate	able to operate a computer
Information literate	able to obtain and apply relevant information
Numerically or computationally literate	able to calculate or reason numerically

Figure 3: Literacy Types

Study Design

The four types of health literacy: visual, information, computer and numeric (nnlm,2013) will be addressed for each level of the PEF. The resulting levels of health literacy will be validated using the Delphi approach. As Delphi technique proved successful in establishing structured communication among diverse individuals to gain consensus on a certain topic (Linstone & Turoff,2002), It was chosen to fulfill the study purpose. We are targeting around 100 participants who are different players in the healthcare field, such as: physicians, nurses, healthcare educators, healthcare managers, field experts and researchers, health informaticians and patients advocates

Expected Outcomes

In the first round, participants will be asked to "accept", "reject" or "add" to health literacy types assigned to each phase of the PEF in a proposed PEF-Health Literacy types matrix. Afterwards, responses will be quantified and ranked and the new matrix will be sent again in the second round to get consensus on it.

	1	2	3	4	5	
Information and Way-Finding	1, 2,5	2,3,5	2,3,5	2,3,5	1,2,3,4,5	
e-Tools	1,2	1,2,3,4,5	1,2,3,4,5	1,2,3,4,5	3,5	
Forms	2,4	2,3,5	1,2,3,4,5	?	1,2,3,4,5	
Patient Specific Education	1,2,4	1,2,4	1,2,3,4,5	1,2,3,4,5	1,2,3,4,5	1=Visual
Patient Access	NA	3,5	1,2,3,4,5 (PHR)	N/A	1,2,3,4,5	2=Information
Patient Generated Data	NA	NA	1,2,3,4,5	1,2,3,4,5	No pt role	3= Computer
Interoperable Records	NA	NA	No pt role	No pt role	No pt role	4=Numeric
Collaborative Care	NA	NA	NA	No pt role	No pt role	5=Intenet
Support My e-Community	NA	NA	NA	NA	1,2,3,4,5	

Figure 4: Tentative PEF-Health Literacy Matrix

References

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- Figure 1: Source: National health Collaboartive, 2012 The Patient Engagement Framework
- Figure 2: Source: U.S. Department of Education, Institute of Education Sciences, 2003 National Assessment of Adult Literacy.