Title: Provider Health Literacy, cultural and communication competence: towards an integrated approach in the Northern Territory.

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Preamble
The purpose of the paper is to articulate commonalities across the three themes of health literacy, health communication and cultural security.

The paper consolidates contemporary literature and research findings and presents these perspectives within the Northern Territory (NT) health services context to generate further discussion for implementation and application within the NT health services.

This paper will assist the Department of Health to take a greater lead in establishing a culturally appropriate organisation through developing effective health literate systems, buildings, staff and clients.

Executive summary
Health literacy is increasingly recognised internationally, nationally and locally as an important influence on the safety and quality of health care and as a factor influencing health outcomes. However, there is considerable variation in the ways in which the term ‘health literacy’ is conceptualised and applied. Cultural and linguistic diversity introduces further complexity which must be considered, particular in a context of high diversity such as the Northern Territory. This paper considers a range of definitions, dimensions, and approaches to measurement of health literacy, and their relevance to health care in the NT. In summary, key issues include: consideration of the health literacy environment (including the health literacy of organisations, systems, services, and staff) - rather than focusing solely on consumer health literacy

- implications of cultural and linguistic diversity for addressing health literacy
- the relationship between health literacy, health communication and cultural security/cultural competence
- adoption of a ‘universal precautions’ approach to meet diverse needs rather than a focus on limitations of individuals
- measurement of health literacy that encompasses provider health literacy and the health literacy environment;

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• integration of cultural competence, communication and health literacy to reflect the extent to which they are interrelated and to enable efficient and appropriate action across all levels of health care.

The need to consider health literacy within the context of language and culture is crucial in the NT given the diversity of the population. The influences beyond the consumer, as well as accommodation of the needs of consumers, are also emerging as important concepts in the health literacy debate. Health literacy, cultural competence and communication competence need to be addressed at organizational, system and individual levels to ensure health care is responsive to diverse needs. There is increasing recognition of the extent to which these concepts are interrelated but there have been few attempts at integration, for example, in staff training or in the development of organizational standards or performance measures. The evidence presented in this paper suggests that integration of health literacy, cultural and communication competence can support provision of culturally responsive, equitable and high quality services for Indigenous Territorians to optimize improvements in health outcomes.

1. Definitions of health literacy

Health literacy is increasingly recognised as an important influence on the safety and quality of health care and as a determinant of health. The Calgary Charter on Health Literacy (Coleman et al., 2011) states that: Improving health literacy can contribute to more informed choices, reduced health risks, increased prevention and wellness, better navigation of the health system, improved patient safety, better patient care, fewer inequities in health, and improved quality of life (Coleman et al., 2011, p. 2).

Despite the growing awareness of the importance of health literacy there is no clear consensus regarding the definition of health literacy, which in turn complicates the measurement of health literacy (Frisch, 2011). Key areas of difference relate to whether health literacy is considered to be an individual-level construct or incorporates factors beyond the individual, and whether health literacy level is considered static or dynamic (Berkman, Davis, & McCormack, 2010). Definitions also range from those that consider health literacy as a set of skills to broader definitions that move towards defining health literacy as a theory of behavior change (Pleasant & McKinney, 2011) or as social practice (Rubin, Parmar, Freimuth, Kaley, & Okundaye, 2011). Health literacy has been described as ‘complex and multifaceted’ (Zarcadoolas, 2011, p. 1) and the multiple skill categories and applications that are required to be ‘health literate’ contributes to the challenges in reaching a consensus on a definition of health literacy (Berkman et al., 2010). This is further complicated by different conceptualizations of the range of skill categories.

Early definitions (and assessment tools) were confined to the ability of consumers/patients to access print-based information. However, most definitions now recognise health literacy as more than general literacy skills. For example, The Calgary Charter on Health Literacy (2011) includes: reading, writing, listening, speaking, numeracy, and critical analysis, as well as communication and interaction skills (Coleman et al., 2011, p. 1). A working knowledge of disease processes, ability to use technology, social networking and interaction, self-efficacy and motivation for political action regarding health issues are also included in some definitions (Berkman et al., 2011).
The ability to **navigate health services** is also included in some health literacy frameworks. For example, a report on a project conducted in the NT (Christie, 2010) suggested that: “health literacy” needs to be defined in terms of both what Aboriginal clients know about the biomedical understandings of their health and sickness, and also in terms of the services, systems and resources which are available for them to access help in discussions over health and sickness, and their ability to access and use those systems” (Christie, 2010, p. 6). Similarly, Coleman et al. (Coleman et al., 2011) suggest that: Health literacy includes an awareness of and ability to navigate differences between the cultures of the health system and the public. It also includes an awareness of and ability to minimize the power imbalances between the health system and the public (Coleman et al., 2011, p. 4).

**Cultural and conceptual knowledge** are increasingly included within the domain of health literacy (e.g. Baker, 2006). An example of a definition that incorporates conceptual knowledge is that proposed by Zarcadoolas et al. (2005): “the wide range of skills and competencies that people develop to seek out, comprehend, evaluate and use health information and concepts to make informed choices, reduce health risks and increase quality of life” (Zarcadoolas, Pleasant, & Greer, 2005, pp. 196-197). Their model of health literacy encompasses four domains: **fundamental literacy** (reading, writing, speaking and numeracy), **science literacy** (levels of competence with science and technology, including and understanding of scientific uncertainty and the possibility of rapid change), **civic literacy** (the ability to become aware of public issues and to become involved in the decision-making process) and **cultural literacy** (the ability to recognize and use collective beliefs, customs, world-view and social identity in order to interpret and act on health information) (Zarcadoolas et al., 2005, p. 197). The need to consider differences in worldview in approaches to improving health literacy has been also been strongly argued in the context of Indigenous health education in the N.T. (Vass, Mitchell, & Dhurrkay, 2011)

**Health literacy as a strategy for empowerment** is a key concept within some frameworks. A frequently cited analysis of health literacy by Nutbeam (2000) describes three levels of health literacy that progressively lead to greater autonomy and personal empowerment: **basic/functional** (reading and writing skills needed to function in everyday life; **communicative/interactive** (cognitive and literacy skills combined with communication and social skills need to participate in a range of situations and to apply information to changing circumstances); and **critical** health literacy (more advanced cognitive skills required for critical analysis of information to exert greater control over life events and situations) (Nutbeam, 2000).

Such expanded concepts of health literacy are reflected in a discussion paper about improving health literacy for Canadians (Mitic & Rootman, 2012)which described a health-literate individual as one who is “able to seek and assess the health information required to 1) understand and carry out instructions for self-care, including the administering of complex daily medical regimens, 2) plan and achieve the lifestyle adjustments required for improved health, 3) make informed positive health-related decisions, 4) know how and when to access health care when necessary, 5) share health promoting activities with others, and 6) address health issues in the community and society (Mitic & Rootman, 2012, p. 3).

Nutbeam (2008) suggests that an important distinction can also be made between definitions that view health literacy as a clinical ‘risk’ and those that view health literacy as a personal ‘asset’. He suggests as an example of health literacy as ‘risk’ a widely used definition from an influential report by the US Institute of Medicine (Nielsen-Bohlman & Panzer, 2004)
which was originally developed by Razdan and Parker (2000) i.e.: The degree to which individuals have the capacity to obtain, process and understand basic health information and services needed to make appropriate health decisions. Nutbeam argues that this definition places health literacy as a risk factor that needs to be identified and appropriately managed in clinical care. In contrast, the World Health Organisation definition: ‘the cognitive and social skills which determine the motivation and ability of individuals to gain access to, understand and use information in ways which promote and maintain good health’ reflects health literacy as a personal ‘asset’. In this definition health literacy is a means to enabling individuals to exert greater control over their health and the range of personal, social and environmental determinants of health, rather than simply a set of functional capabilities. Such fundamental differences have important implications for both measurement and application of health literacy in clinical as well as community settings (Nutbeam, 2008).

2. Health literacy and providers of health services

Concepts of health literacy also differ in the extent to which health literacy is considered an individual-level construct or is conceptualized more broadly. Many definitions, as the examples above illustrate, have focused exclusively on the patient/consumer. In the context of NT health services the definition of health literacy is also consumer-focused i.e. ‘Having access to the information necessary, as well as the skills and resources required, to make decisions for one’s own health’ (Department of Health and Families, 2009, p. 25). However, there appears do be little discussion in the literature regarding who determines what information is ‘necessary’ and there is evidence that there is a mismatch between the perceptions of health service providers and the perceptions of Indigenous consumers about the level of health literacy they want and need to make informed decisions (Lowell et al., 2012).

The influence of health staff and health systems on consumer health literacy is increasingly acknowledged and there is a growing focus on the health literacy of organisations, systems and staff. A major report on health literacy in the United States (Nielsen-Bohlman & Panzer, 2004) emphasized the factors beyond the individual that must be considered in a comprehensive approach to the assessment of health literacy:

“Health literacy is a shared function of social and individual factors.... Equally important are the communication and assessment skills of the people individuals interact with regarding health, and the ability of the media, the marketplace, and government agencies to provide health information in a manner appropriate to the audience” (Nielsen-Bohlman & Panzer, 2004, p. 5).

Similarly, a recent discussion paper produced to stimulate discussion about health literacy in Australia includes a focus on the health literacy environment’:

“the infrastructure, policies, processes, materials and relationships that exist within the health system that make it easier or more difficult for consumers to navigate, understand and use health information and services to make effective decisions and take appropriate action about health and health care” (Australian Commission on Safety and Quality in Health Care, 2013, p. 5).

The communication processes and relationships that exist between consumers and healthcare providers are considered an important component of the health literacy environment,
including shared decision making processes, tailoring of information to individual needs and checking that information is understood (Australian Commission on Safety and Quality in Health Care, 2013, p. 12).

The Calgary Charter proposes that health literacy applies to all individuals (including consumers and health staff) and to health systems and provides the following examples:

- An individual can be health literate by using the skills needed to find, understand, evaluate, communicate, and use information.
- Health care professionals can be health literate by presenting information in ways that improve understanding and ability of people to act on the information.
- Systems can be health literate by providing equal, easy, and shame-free access to and delivery of health care and health information (Coleman et al., 2011, p. 2)

The U.S. Institute of Medicine has also produced a discussion paper which identifies ten attributes of a health literate organization and one of these attributes is to prepare the workforce to be health literate (Brach et al., 2012). The health literacy of providers was also identified as important by Christie et al. (2010) who proposed the term ‘both ways health literacy’ ‘to emphasise the importance of valuing both biomedical and Aboriginal knowledges’, structures and processes in relation to developing shared understanding about human being, the body, pathology, sickness and health (wellness) (Christie, 2010, p. 6). The Australian Safety and Quality Council Goals for Health Care now include ‘becoming a health literate organisation’ as a core outcome within the priority area of ‘partnering with consumers’ (Australian Safety and Quality Goals for Health Care, 2012).

Concern with reduction of health disparities is a recurring theme in the health literacy literature, particularly where it relates to culturally and linguistically diverse populations. Liè, Carter-Pokras, Braun, and Coleman (2012)suggest that health provider competencies can address unequal access to shared understanding of information between the patient and health professional. Specifically, health professionals can contribute to reduction in health disparities by:

“recognizing the existence of a culture of the health professions as well as their own assumptions and biases, deploying appropriate communication skills and utilizing team resources to recognize, diagnose, and address low health literacy and cultural differences” (Liè et al., 2012, p. 15).

The increasing emphasis on providers’ accommodation of the needs of consumers and lowering barriers to access, rather than focusing on the health literacy limitations of consumers, is particularly relevant to contexts with culturally and linguistically diverse populations such as the N.T.

3. Health literacy and health communication

A lack of consensus in the literature regarding the relationship between health literacy and health communication is also evident and communication is positioned in different ways in various frameworks of health literacy. Health communication has been defined as interpersonal or mass communication activities focused on improving the health of individuals and populations (Ishikawa & Takahiro, 2010). In general, health communication and health literacy are seen as related but distinct concepts: health communication is the
process of exchanging information whereas health literacy is the use of a set of skills and abilities (see Figure 1.). Berkman et al. (2010) describe health literacy as “an integral component of health communication” (Berkman et al., 2010, p. 18). Communication has also been viewed as a mediator within the patient-provider interaction between health literacy and health outcomes (e.g. Paasche-Orlow & Wolf, 2007). Squiers, Peinado, Berkman, Boudewyns, and McCormack (2012) propose that, as health information is often conveyed orally, communication skills including the ability to listen, speak and negotiate are dimensions of health literacy that contribute independently to the overarching construct of health literacy skills (Squiers et al., 2012, p. 12). They also highlight the importance of the communication skills of “the messenger” as being “critical to an individual’s skill in interpreting the message being delivered” (Squiers et al., 2012, p. 49). Although there is a connection between health literacy and communication skills, it is possible to have excellent communication skills but not be very health literate although health literacy is necessary to communicate effectively about health. Both health literacy and communication should be addressed, measured, and evaluated (Coleman et al., 2011).

Berkman et al. (2010) consider a conceptual model of health literacy that embraces the role of language, culture and social capital to be appropriate and useful but caution that “the conceptualization of health literacy does not become immeasurable and blur with other concepts, such as patient-centered communication” (Berkman et al., 2010, p. 17). There is an increasing move to integrate health literacy and cultural competence due to the extent to which they are interrelated (see Section 4). Inclusion of health communication in this process of integration and alignment would also appear to be logical due to the extent of intersection and interdependence between both the concepts of health literacy and cultural competence with health communication.
4. Culture, language and health literacy

A limitation of many definitions of health literacy is the decontextualisation and assumption of Western socio-cultural contexts (Smylie, Williams, & Cooper, 2006, p. 13). The importance of **considering health literacy in the context of language and culture** is increasingly being recognized – and it has been suggested that health literacy should be viewed through “*multicultural and multilingual lenses*” (McKee & Paasche-Orlow, 2012, pp. 10-11). This is particularly relevant in the context of the Northern Territory where 26.8% of the population is Aboriginal according to the 2011 Census data (Australian Bureau of Statistics, 2012) and approximately 70% speak a language other than English at home. In remote areas, the percentage is much higher. For example, in the East Arnhem region of the N.T. 97.5% of the population is Aboriginal and 2.1% of the population speaks English only at home (Australian Bureau of Statistics, 2012).

A report by Institute of Medicine in the U.S. states that: Health literacy is a shared function of social and individual factors. Individuals’ health literacy skills and capacities are mediated by their education, culture, and language (Nielsen-Bohlman & Panzer, 2004, p. 5). This report recognizes the importance of understanding and addressing the interrelationship of literacy, language and culture for health services with diverse populations and suggests that: Differing cultural and educational backgrounds between patients and providers, as well as between those who create health information and those who use it may contribute to problems in health literacy (Nielsen-Bohlman & Panzer, 2004, p. 12). Depending on
Consideration of culture and language therefore requires an interpretation of health literacy as dynamic rather than static, as the health literacy of an individual will vary depending on the cultural, conceptual and linguistic demands of the context. In terms of interactions with the healthcare system, culturally influenced perceptions, definitions and barriers can help to determine the adequacy of health literacy skills in different settings (Nielsen-Bohlman & Panzer, 2004, p. 12). Health literacy as a dynamic concept, varying according to context and participants, is illustrated in two scenarios described in Box 1.

The influences beyond the consumer, as well as accommodation of the needs of consumers, are emerging as important concepts in the health literacy debate. Cultural competence - and related concepts such as cultural safety, cultural security and cultural respect - are widely recognized as important in health care provision for culturally and linguistically diverse populations. However, there has been little consideration in the literature of the relationship between such concepts and health literacy. Concern has been expressed, for example, about the teaching of “health literacy” separately to health professionals and Lie et al. (2012)suggest a “collaborative of health literacy and cultural competence educators working together to share tools, training strategies, and resources for the common goal of health disparities reduction…” (Lie et al., 2012, p. 20).

For a health professional to be ‘health literate’ i.e. to present information in ways that improve understanding and ability of people to act on the information(Coleman et al., 2011) cultural and linguistic competence is also necessary in interactions with consumers from diverse backgrounds. An organization must also be culturally competent to be health literate, that is, providing services that are responsive to the cultural and linguistic needs of consumers. Health literacy, cultural competence and linguistic competence all need to be addressed to ensure effective communication - without such integration health care will not be responsive the needs of vulnerable groups (Pleasant & McKinney, 2011).

5. Measurement of health literacy

Despite the wide range of definitions and broadening scope of health literacy described in
earlier sections of this paper this is not reflected in the dominant approaches to measurement. Pleasant and McKinney (2011) suggest that ‘there is a distinct mismatch between the attributes included in the most recent definitions and theories of health literacy and the attributes actually included in existing screening or measurement devices for health literacy’ (Pleasant & McKinney, 2011, p. 97). Confusion and debate about the definition of health literacy is reflected in lack of agreement about how it should be measured (Baker, 2006).

Just as definitions of health literacy initially focused on print literacy, measures of health literacy have been almost exclusively text-based and focus on what patients can read in a clinical context (Nielsen-Bohlman & Panzer, 2004; Pleasant, McKinney, & Rikard, 2011). Lack of consistency even across these narrowly focused measures has also been documented. A study that examined variation across three commonly used brief health literacy assessment instruments (Test of Functional Health Literacy in Adults; the Rapid Estimate of Adult Literacy in Medicine; and a 4-Item Brief Health Literacy Screening Tool) found that these instruments measure health literacy differently and appear to be conceptually different (Haun, Luther, Dodd, & Donaldson, 2012). An Australian study that compared the results of three tests (Rapid Estimate of Adult Literacy in Medicine (REALM), Test of Functional Health Literacy in Adults (TOFHLA) and Newest Vital Sign (NVS)) also found that the measures appeared to measure different (although related) constructs and used different cut offs to indicate poor health literacy (Barber et al., 2009).

Although oral communication skills (speaking and listening) are considered a critical component in recent definitions of health literacy (e.g. Berkman et al., 2010) few assessment tools measure communicative /interactive health literacy (Ishikawa & Takahiro, 2010). Recently developed tools such as the TALKDOC (Helitzer, Hollis, Sanders, & Roybal, 2012)and the Health Literacy Skills Instrument (Bann, McCormack, Berkman, & Squiers, 2012) consider oral communication but measure only listening skills. TALKDOC does, however, measure constructs of knowledge and attitudes that are not addressed in other assessment tools. Self-reports of health literacy skills are a more recent development in measurement although their utility as measures of health literacy remains largely unconfirmed (Begoray & Kwan, 2012, p. 23).

System navigation has also been included in more recent health literacy assessment tools (e.g. Bann et al., 2012) but other critical skills such as cultural and conceptual knowledge, how individuals use information and communication between health professionals and systems are not included (Nielsen-Bohlman & Panzer, 2004; Pleasant et al., 2011). Baker (2006) also argues that measures are inadequate in commonly used screening tools to assess the relationship between individual communication capacities, the health care system, and broader society. Nutbeam (2008) suggests that different tools are needed assess interactive and critical literacy which require ‘additional assessment of oral literacy and social skills such as those involved in negotiation and advocacy’ (Nutbeam, 2008, p. 2076). He also suggests that different tools are required at different ages and stages of life and in different social contexts (Nutbeam, 2008).

There are increasing doubts being raised about the utility and relevance of measuring health literacy at the individual consumer level and two opposing views are reflected in the literature. Some authors argue that assessment of individual health literacy in clinical contexts is critical to ensure effective communication (e.g. Barber et al., 2009; Heinrich, 2012). Others argue that due to importance of health literacy as a determinant of public and individual health and the risk of labeling individuals as ‘low health literate’ in a clinical
setting, resources would be better used to lower barriers to access for everyone (e.g. Baker, 2006; Pleasant et al., 2011). Baker (2006) suggests that, rather than individual screening, it may be better to adopt the principle of “universal precautions” to avoid miscommunication and suggests the use of plain language, communication tools (e.g., multimedia), and “teach back” (having an individual repeat back instructions to assess comprehension) with all patients (Baker, 2006, p. 881).

A number of health literacy frameworks now include competencies of both the providers of health care and information (health care professionals, systems or disseminators of public health messages) and consumers. Approaches to assessment of health literacy must therefore address the health literacy capacity of both providers and consumers as well as the broader array of skills included in such expanded conceptual frameworks (Pleasant et al., 2011). An example of a measure of health literacy that aims for a more comprehensive approach capable of assessing health literacy needs across individuals and organisations – the Health Literacy Questionnaire - has recently been developed in Australia. It is based on consumer responses to 44 items across nine scales that include: feeling understood and supported by healthcare providers; having sufficient information to manage my health; actively managing my health; social support for health; appraisal of health information; ability to actively engage with healthcare providers; navigating the healthcare system; ability to find good health information; and understand health information well enough to know what to do (Osborne, Batterham, Elsworth, Hawkins, & Buchbinder, 2013). Approaches to measurement of provider health literacy, although emerging, do not yet reflect the importance now attributed to the competencies of providers and the health literacy environment.

Measurement of health literacy in culturally and linguistically diverse populations is particularly problematic. A report examining health literacy in Australia (Australian Bureau of Statistics, 2006) found a low level of health literacy in people born overseas in a non-English speaking country. Very remote parts of Australia were excluded from the survey, thus excluding information on the health literacy of Australian-born (i.e. Indigenous) people who speak a language other than English. Another Australian study (Barber et al., 2009) also found that being born in a non-English speaking country was associated with lower scores on all three health literacy measures used in their research. Few of the tools currently in use are appropriate for assessing health literacy (of either consumers or providers) with individuals who do not speak English as their first language (Parker et al., 2012). Results from the use of such tools with consumers from non-English speaking backgrounds will be confounded by cultural and language differences and will provide no indication of the individual’s health literacy, for example, in contexts where their primary language is used (Todd & Hoffman-Goetz, 2011). The limitations of current tools for assessing either provider or consumer health literacy in the context of culturally and linguistically diverse populations is particularly relevant in the Northern Territory.

6. Strategies to address health literacy

To address health literacy in a coordinated way, it is necessary to embed health literacy into high-level systems and organisational policies and practices. Clear, focused and useable health information, effective interpersonal communication and integration of health literacy into education for consumers and healthcare providers are also required (Australian Commission on Safety and Quality in Health Care, 2013). In an environment of high diversity the interconnections between health literacy, culture and language must also be considered in policies, practice and training.
As well, engagement of those that directly experience the barriers and benefits of health literacy in the process of developing a comprehensive approach is crucial. Active dialogue is needed with all those who have an interest in the role of health literacy as a determinant of health including individuals, community-based groups and government agencies (Pleasant et al., 2011, p. 18).

Extensive work has been carried out on the development of organizational and professional standards for cultural and linguistic competence in health care and to a lesser extent for health literacy (e.g., Brach et al., 2012; Mitic & Rootman, 2012) but there appear to have been few attempts at developing an integrated approach. A notable exception is the work of Andrulis & Brach (2007) who developed an initial model, integrating standards and strategies related to health literacy with cultural and linguistic competence, for health care providers and organisations to improve health care quality (Andrulis & Brach, 2007). There is a need to develop assessment methods that are comprehensive and locally relevant across all dimensions of health literacy, including competencies of providers (staff, systems and organisations in health and related domains). The first step in this process requires a consensus on the dimensions of health literacy and development of relevant standards against which to measure performance.

Many areas of intersection are evident between the professional and organizational standards developed for cultural competence and those developed for health literacy. Integration of cultural competence, communication and health literacy within a unified set of standards would reflect the extent to which they are interrelated. Such integration would also facilitate more efficient and appropriate monitoring and assessment across all domains to promote provision of services that are responsive to the diverse needs of consumers in the NT.

The level of provider cultural and communication competence and health literacy will collectively determine the extent to which health care is responsive to the diverse cultural and communication needs of consumers. Systems and services that effectively accommodate these needs promote consumer health literacy and facilitate improvements in health outcomes. This interconnection between the competencies of health care providers (systems, services and staff) and consumer health outcomes is illustrated in Figure 2.
7. Conclusion

The evidence presented in this paper supports a coordinated approach, integrating health literacy, cultural and linguistic competence at organisational, system, service and individual levels. Such an approach promotes improvement across all domains to achieve culturally responsive, equitable and high quality services for all Territorians, ensuring effective communication and enhancing health literacy, to optimize health outcomes.
References


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