

**M**ost of the current efforts to improve health outcomes and reduce health care costs depend on an informed health care consumer. However, people cannot make informed health care decisions if they do not understand the health information they receive. The degree to which people understand health information and can successfully navigate the health care system is described as their health literacy. Patients need adequate health literacy to explain their health problems to their providers and to understand the health information they receive. Health care terminology and treatment instructions can be highly technical and complex. Health literacy is critical for understanding prescriptions and warning labels. In addition, patients need adequate health literacy to navigate our complex health system.

Literacy is an essential component of health literacy. Many studies have examined the relationship between literacy and health. People with low literacy are more likely to have difficulty understanding written or spoken medical advice and to suffer adverse health outcomes. They are less able to understand health care information, including their own diagnosis and treatment recommendations. Consequently, they are less likely to comply with their treatment protocols. Over 40% of American adults have basic or below basic literacy, and North Carolina ranks 41st of all the states in basic adult literacy levels. Whereas people with low reading and/or numeracy skills face challenges on a regular basis, nearly everyone has struggled to understand complex health information at some point in their lives. Thus, health information should be communicated in a way that is understandable to people at all literacy levels.

The NC IOM Health Literacy Task Force examined strategies for improving health communications for the benefit of *all* North Carolinians. Some of the Task Force recommendations are targeted to people with low literacy skills. However, most of the recommendations are universal, in recognition that everyone can experience times of low health literacy if faced with stressful health situations or complex health care information. The Task Force set out to identify best practices of communicating health-related information for all populations and to incorporate these practices into existing systems of care. The Task Force also identified strategies to improve health literacy awareness among health care professionals and literacy professionals. In addition, the Task Force developed recommendations to incorporate health literacy strategies into adult literacy, Adult Basic Education, and English as a Second Language courses. The Task Force also recommended consumers be more actively engaged in ensuring they understand the health information they receive. Consequently, the Task Force recommended a broad-based social marketing campaign to educate consumers and provide them with skills to address this problem. The following are the Task Force's recommendations along with the groups who have the primary responsibility for implementing these recommendations.

	NC DHHS	AHEC	Health Professions Schools	Public/Private Payers	Foundations	Other
<b>Effective Communication Practices</b>						
<p><b>Rec. 3.1.</b>                      Foundations at state and national levels should develop a competitive process to create a North Carolina Health Literacy Center of Excellence. The Center would work collaboratively with other organizations to educate health professionals, identify evidence-based guidelines or best practices of health communication, collect and disseminate appropriate health education materials, and otherwise work to address problems of low health literacy throughout the state.</p> <p>a) The Center should help increase the capacity of health care professionals to communicate more effectively and otherwise address the problems faced by people with low health literacy. Specifically, the Center should work in conjunction with other appropriate organizations to:</p> <ul style="list-style-type: none"> <li>i) review existing and emerging research to identify evidence-based methods of communicating health information and serving people with low health literacy;</li> <li>ii) disseminate evidence-based models of health care communication and services for people with low health literacy;</li> <li>iii) develop undergraduate, graduate, and continuing education curricula that teach health professionals about the problems of health literacy and evidence-based guidelines or best practices for people with low health literacy; and</li> <li>iv) develop expertise in designing health education materials appropriate for people with low health literacy and work with other organizations on “train the trainer” events to help disseminate these skills to state and local agencies, health care providers, and other organizations.</li> </ul> <p>b) The Center should help increase the capacity of adult literacy professionals to address problems of low health literacy. Specifically, the Center should work with adult literacy experts to:</p>	✓	✓	✓	✓	✓	✓ (Consumers, Adult Literacy Experts, Academic Health Centers, Community Colleges)

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<p>i) identify best practices in improving health literacy skills and</p> <p>ii) develop a health literacy toolkit designed to build literacy and self advocacy skills for use in adult education settings.</p> <p>c) The Center should identify, collect, and disseminate examples of effective written and nonwritten health information designed to educate consumers with low health literacy about different health conditions and about how to manage health problems. The Center should identify, collect, and disseminate practical tools for providers to evaluate current materials and should provide links to examples of effective health information. These materials and tools should be made available throughout the state to public and private agencies, organizations, and providers through the Area Health Education Centers (AHEC) Program Digital Library and NC Health Info. The Center should develop a process to evaluate or obtain feedback on the usefulness of the materials and tools in providing and evaluating health information.</p> <p>d) The Center should evaluate the effectiveness of its dissemination and educational efforts to ensure the Center’s collaborative activities are helping improve communication and health services provided to people with low health literacy.</p> <p>e) The Center shall have an Advisory Committee that includes, but is not limited to, representatives of adult literacy programs and local literacy councils, academic medical schools and other health professions schools, AHEC, North Carolina Department of Health and Human Services divisions and agencies, North Carolina Community College System, health professional associations, health care providers, safety net providers, Community Care of North Carolina, North Carolina State Health Plan, private insurers, and consumers with low health literacy.</p>						

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<b>Improving Communication in Current Systems of Care</b>						
<p><b>Rec. 4.1.</b></p> <p>a) Institutions and organizations that train health professionals should incorporate health literacy training into their undergraduate, graduate, and continuing education curricula. Health literacy training should be integrated into existing provider-patient communication classes, condition-specific educational curricula, interpreter or cultural sensitivity courses, clinical rotations, and ongoing continuing education courses. The curricula should provide information about the number of people with low health literacy and how low health literacy affects patient understanding, adherence to medical instructions, and health outcomes. Trainings should emphasize communication skills that enhance consumer understanding of health care information. In addition, training should give providers an opportunity to test and model new communication skills.</p> <p>i) Medical and other health professions schools should incorporate health literacy information into their undergraduate and graduate curricula, clinical rotations, and residency programs.</p> <p>ii) North Carolina community colleges should incorporate health literacy information into their allied health, interpreter training, practice management, and other health-related curricula.</p> <p>iii) The North Carolina Area Health Education Centers (AHEC) program should incorporate health literacy information into their continuing education courses, residency programs, and clinical training in community settings.</p> <p>iv) Professional associations should include information on health literacy in their annual meetings and continuing education curricula.</p> <p>b) AHEC, Carolinas Center for Medical Excellence, Community Care of North Carolina, Division of Public</p>	✓	✓	✓			<p>✓</p> <p>(Community Colleges, Professional Associations, NC Center for Hospital and Patient Safety, Carolina Center for Medical Excellence, NC Community Practitioner Program)</p>

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Health, North Carolina Center for Hospital Quality and Patient Safety, North Carolina Community Practitioner Program, safety net organizations, and health professional associations should work collaboratively to help practices and health care professionals effectively implement successful health literacy strategies into their practices.						
<b>Rec. 4.2.</b> The North Carolina Board of Pharmacy should develop requirements for oral and written consumer medication information and standard prescription bottle labeling that incorporate evidence-based guidelines or best practices for effective communication of prescription information to consumers. The North Carolina Board of Pharmacy should consult with stakeholders, consumers, and content experts in developing these materials.						✓ (NC Board of Pharmacy)
<b>Rec. 4.3.</b> a) North Carolina foundations should fund demonstration projects to test new models of care that enhance the role of pharmacists as medication counselors to ensure patients understand how to appropriately take their medicine. New models should be evaluated to determine whether they enhance patient understanding of medication, improve medication adherence, and improve health outcomes. b) If successful, public and private insurers and payers should modify reimbursement policies to support the long-term viability of these successful models of care.					✓	✓ (Pharmacists)
<b>Rec. 4.4.</b> a) The North Carolina Department of Health and Human Services (NC DHHS) should develop standardized criteria to guide the development of all written consumer information materials used by state and locally funded programs. The criteria should be based on adult education principles aimed at ensuring the readability of written materials for people with lower literacy levels. To the extent possible, written materials should:	✓					

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<ul style="list-style-type: none"> <li>i) be written at an appropriate level for the targeted audience;</li> <li>ii) be easy to read with a lot of white space;</li> <li>iii) include visual materials that motivate the reader or explain the text;</li> <li>iv) be linguistically and culturally appropriate;</li> <li>v) engage and inspire the reader towards targeted health behaviors; and</li> <li>vi) be reviewed by consumers and families prior to use.</li> </ul> <ul style="list-style-type: none"> <li>b) NC DHHS also should incorporate best practices for website development that include, but are not limited to, the factors listed above.</li> <li>c) NC DHHS should review other visual or audio patient or community education materials to ensure the materials are linguistically and culturally appropriate and should incorporate best practices for communication in these media. To the extent possible, materials should be reviewed by consumers and families prior to use.</li> <li>d) NC DHHS should refine the existing review process in each division to ensure materials are understandable for the targeted audience prior to use.</li> <li>e) NC DHHS and all appropriate divisions and agencies should review their paperwork and procedures to ensure materials and signage do not discourage individuals with low health literacy from obtaining needed assistance.</li> </ul>						
<p><b>Rec. 4.5.</b> The North Carolina Department of Health and Human Services (NC DHHS) should ensure there are trained and competent staff in each division who can disseminate health literacy skills and strategies more broadly to health care professionals and others who work with people with low health literacy:</p> <ul style="list-style-type: none"> <li>a) Community Care of North Carolina (CCNC) should ensure there is at least one case manager (eg, nurse, social worker, or health educator) in each CCNC network that is competent to teach health literacy skills and strategies and is responsible</li> </ul>	↙					

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<p>for disseminating this information to other health professionals and care coordinators in his or her network.</p> <p>b) The Division of Public Health should ensure there is at least one health educator in each health department who is competent to teach health literacy skills and strategies and is responsible for disseminating this information to other health department staff and local providers of care.</p> <p>c) The Division of Mental Health, Developmental Disabilities and Substance Abuse Services (MHDDSAS) and local management entities should ensure there is at least one health educator at the state and local management entities who is competent to teach health literacy skills and strategies and is responsible for disseminating this information to providers of MHDDSAS services.</p> <p>d) The Division of Aging should ensure there is at least one health educator at the state level who is competent to teach health literacy skills and strategies and is responsible for disseminating this information to Area Agencies on Aging, senior centers, and other organizations serving older adults.</p> <p>e) Other NC DHHS divisions and agencies that work with health care professionals should ensure there is at least one trained and competent staff person who can disseminate health literacy skills and strategies to other staff and to providers of care at the state and local communities.</p>						
<p><b>Rec. 4.6.</b> In order to ensure written health care materials are understandable to people with low literacy levels:</p> <p>a) Public and private insurers and payers, health care systems, health care providers, academic institutions and researchers, and other health-related businesses should develop criteria to guide the development of all written consumer information materials. The criteria should be based on adult education principles aimed at ensuring the readability of written materials for people with low literacy levels. To the extent possible, materials should:</p>				↙	↙	<p>↙ (Health Care Systems, Academic Institutions, Researchers, Providers, NC Dept. of Insurance)</p>

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<ul style="list-style-type: none"> <li>i) be written at an appropriate level for the targeted audience;</li> <li>ii) be easy to read with a lot of white space;</li> <li>iii) include visual materials that motivate the reader or explain the text;</li> <li>iv) be linguistically and culturally appropriate;</li> <li>v) engage and inspire the reader towards targeted health behaviors; and</li> <li>vi) be reviewed by consumers, families, and other members of the target population prior to use.</li> </ul> <p>b) Public and private insurers and payers, health care systems, health care providers, academic institutions and researchers, and other health-related businesses should incorporate best practices for website development that include, but are not limited to, the factors listed above.</p> <p>c) Public and private insurers and payers, health care systems, health care providers, academic institutions and researchers, and other health-related businesses should establish a review process to ensure all materials are reviewed for understandability prior to use.</p> <p>d) Public and private insurers and payers, health care systems, and health care providers should review other visual or audio patient or community education materials to ensure the materials are linguistically and culturally appropriate and should incorporate best practices for communication in these media. Materials should be reviewed by consumers and families prior to use.</p> <p>e) The Department of Insurance should seek changes in existing insurance laws, N.C. Gen. Stat. §§ 58-38-1 <i>et seq.</i>, 58-66-1 <i>et seq.</i>, to ensure the readability of written insurance materials for people with low literacy levels using the criteria listed in (a) above.</p> <p>f) North Carolina foundations and other health care funders should give priority to organizational grantees that produce health materials for use by consumers that meet the criteria listed in (a) above.</p>						



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<p><b>Rec. 4.7.</b>                      The North Carolina Department of Health and Human Services, Community Care of North Carolina, Division of Public Health, public and private insurers and payers should:</p> <ul style="list-style-type: none"> <li>a) incorporate health literacy strategies in their disease management and case management initiatives so that people with all levels of health literacy can benefit and become active managers of their own health conditions;</li> <li>b) use and reimburse case managers, health educators, community health workers, and lay health workers who have been trained in health literacy strategies to help educate people about their health problems and how to manage their conditions; and</li> <li>c) explore the appropriate use of CDs, videos, and other non-print information as a means of better educating people with low health literacy.</li> </ul>	↙			↙		
<p><b>Rec. 4.8.</b></p> <ul style="list-style-type: none"> <li>a) The Division of Medical Assistance should pilot new reimbursement systems to encourage individual and group education sessions that teach patient self-management using appropriate health literacy techniques. In developing this pilot project, the Division should explore tying reimbursement to health care professionals, case managers, health educators, lay health advisors, or other trained health communicators who have received health literacy training.</li> <li>b) Public and private insurers and payers should consider reimbursing for existing CPT codes or other payment methodologies that pay for individual or group education self-management sessions by health professionals, care coordinators, health educators, and lay health providers who have received health literacy training.</li> </ul>	↙			↙		

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<p><b>Rec. 4.9.</b> Malpractice carriers should incorporate health literacy education and effective provider-patient communication skills into their risk management training and should develop systems to reward more effective provider-patient communication.</p>						<p>✓ (Malpractice Carriers)</p>
<p><b>Rec. 4.10.</b> a) North Carolina foundations should fund demonstration projects using promising new models of care in both inpatient and outpatient settings that increase the effectiveness of communication provided to patients with low health literacy. New models should be evaluated to determine if they improve health outcomes. b) Public and private insurers and payers should modify reimbursement policies to support the long-term viability of successful models.</p>				✓	✓	
<p><b>Rec. 4.11.</b> In addition to disease management, the North Carolina Department of Health and Human Services, health care systems and providers, and insurers should explore other ways of educating patients. For example, these organizations and providers should consider: a) expanding the use of trained lay health advisors, case managers, and patient navigators to disseminate health information and to prepare patients and their families for provider-patient interactions; b) using group education settings when appropriate; c) disseminating materials through other forums, such as religious institutions, community fairs, senior games, barber shops, or beauty salons; and d) identifying and implementing outreach efforts to encourage consumers to more actively engage in dialogue with their health care providers.</p>	✓			✓		<p>✓ (Health Care Systems and Providers)</p>

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<p><b>Rec. 4.12.</b>                      The North Carolina General Assembly should provide funding for the Division of Public Health to undertake a broad-based social marketing campaign to activate consumers to engage in dialogue with their health care providers to help mitigate the effects of low health literacy. The Division of Public Health should work with the faith community, safety net providers, and other community leaders and organizations to disseminate this information and to engage these groups as partners in other support activities.</p>	✓					
<b>Incorporating Health Literacy into Adult Education</b>						
<p><b>Rec. 5.1.</b>                      Adult Basic Education and English as a Second Language programs within the North Carolina Community College System, local literacy councils, and other community-based organizations that provide literacy education should disseminate and incorporate health literacy curricula. The curricula should incorporate evidence-based guidelines or best practices for enhancing health literacy.</p> <p>a) The curricula should include, but not be limited to:</p> <ul style="list-style-type: none"> <li>i) basic information about the US health system and where to go for care;</li> <li>ii) information about health insurance programs and billing;</li> <li>iii) information on nutrition and health-related topics; and</li> <li>iv) tools designed to encourage consumers to more actively engage in dialogue with their health care providers.</li> </ul> <p>b) Teaching resources should include access to best practices through on-line resources.</p>						✓ (Adult Basic Education, English as a Second Language, NC Community College System, Local Literacy Councils)

