A White Paper of ***The Three Papers*** series

Geriatric Provider Education

Needs Assessment & Recommendations

Educate the health workforce to care for our elderly citizens

Sensitize the health workforce to culturally appropriate care

Develop comprehensive geriatric policy

Understand what "being old" actually means

Recruit and train informal caregivers

Employers must commit to educating their workforce

Develop a geriatrics workforce resource manual

Leverage community assets to improve care

Geriatric Provider Education

Needs Assessment & Recommendations

Maine Geriatric Education Center

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Executive Summary

The Geriatric Provider Education Needs Assessment was conducted to provide the Maine Geriatric Education Center (Maine GEC) information necessary for designing and improving training opportunities and continuing education offerings in geriatrics and gerontology for Maine's healthcare providers. Specifically, a survey and analysis of current educational requirements and future educational needs of the full spectrum of geriatric care providers in Maine was conducted. Activities included a review of the literature, population and sample identification, design and pilot test of the survey, implementation, and analysis. The timeline for this needs assessment was January to September 2004.

Using an online survey, 286 respondents indicated their preferences in education, course type, and delivery method. While many still prefer to attend a workshop and get away from the workplace, and equally large number indicated their willingness to take an on-line course. Learning needs were identified as knowledge about community resources, geriatric assessment, depression, and end-of-life issues. The online survey methodology was a success and should be used in future data collection efforts.

Recommendations based on the results of the assessment are:

1) Identify and/or develop geriatrics training opportunities that meet the identified needs of healthcare providers, and deliver these opportunities in both preferred and new ways;

2) Encourage educational content that leads to a better understanding of the elderly;

3) Provide a central source of continuous information around changes in geriatrics policy, workforce, standards and care and new practice models;

4) Support geriatric training programs for informal caregivers.

I. Target Problem

According to year 2000 US Census data, 14.4 percent of Maine's population is over age 64. The state ranks fifth among all states for percentage of population age 65 years and older, and also has one of the fastest growing older populations in the country. Over the next 25 years the youth to elders ratio is expected to change from 1.83/1 to 0.98/1 (Bureau of Elder and Adult Services, 2003), an increase of 50 percent. Maine also ranks third nationwide for the percentage of residents age 65 and older living alone. As the nation's fifth most rural state, 45 percent of Maine's elderly live in rural areas.

These demographics must be considered when planning healthcare programs related to the elderly, their providers, and informal caregivers. According to Warshaw and colleagues (2003), at present, no health care profession has the minimum projected number of trained personnel necessary to meet the unique healthcare needs of older adults. The average number of geriatricians nationally is 5.5 per 10,000 seniors over age 75, and the Maine geriatrics workforce reflects this national trend. The Maine Center for Economic Policy reports there are unprecedented staff vacancies in geriatric healthcare settings statewide (Pohlmann, 2003). Turnover rate exceeds 50 percent for some elder care occupations.

The Maine healthcare workforce is not prepared to meet the healthcare needs of the aging Maine population. There are few geriatric specialists in Maine, particularly in rural areas. Counties with the lowest population density have the highest proportion of elders and the fewest providers with expertise in geriatrics and gerontology.

II. Background

The US has a large and growing population of persons over the age of 65 years. In the year 2000 12.4 percent of the population was older than age 65. This is expected to expand to 20 percent by the year 2030 (Warshaw, Bragg, Shaull & Lindsell, 2002). Because the healthcare workforce is ill prepared to meet the unique healthcare needs of this population, the Health Resources and Services Administration (HRSA), Bureau of Health Professions (BHPr) published a series of White Papers in 1998 promoting a National Agenda for Geriatric Education (Klein, 1998). Recommendations from these papers emphasize revision and expansion of current medical, nursing and other allied health educational curriculums; expansion of continuing education in public health and aging; development of multimedia resources and technology for teaching geriatrics; emphasis on interdisciplinary practice; and the promotion of partnerships (Klein, 1998; Segrist, 2000).

When considering the learning needs of geriatric healthcare providers, one must have an understanding of the characteristics of older adults, their health problems, and their use of healthcare services (Kovner, Mezey, & Harrington, 2002). It is suggested by Travis and Duer (1999) that geriatric competence is necessary to provide age appropriate care to the elderly, including basic knowledge of the physiology of aging, assessment skills, medication administration, general principles of adult development and aging, and safety measures. Advanced competencies prepare providers for more complex issues that exist for only select individuals such as incontinence, malnutrition, and depression.

Geriatric medicine as a practice has been in development for over 50 years. It integrates content from many aspects of medicine, and emphasizes problems more common to older adults such as confusion, dementia, falls, incontinence, pain management, sensory impairment, and end of life issues (Warshaw et al., 2002). Despite this integration of content, there is a general lack of preparation for interdisciplinary practice in medicine, as well as in other sectors of healthcare.

It is believed that future academic geriatric medicine programs will develop most effectively in environments that encourage cooperation among medical disciplines,

other health disciplines and social scientists (Warshaw et al., 2002). The team approach helps to integrate the medical, functional, psychosocial and ethical aspects of caring for older adults (Reyes-Ortiz & Moreno-Macias, 2001). Common geriatric areas that span health disciplines include aging and old age perception, demography, theories on aging, provider-older patient relationship, normal aging process, health of older people, geriatric diseases, geriatric assessment and geriatric care (Reyes-Ortiz & Moreno-Macias, 2001).

When preparing a workforce for competence in geriatrics and gerontology, it is also necessary to understand existing barriers. Attitudinal barriers relating to aging, and perceptions about aging and the aged, are often negative. This leads to false beliefs and myths relating to geriatrics, associating aging with illness and disease. Such false beliefs have the potential to cause providers to misdiagnose and prevent effective treatment. (Reyes-Ortiz & Moreno-Macias, 2001).

Assessments conducted by other Geriatric Education Centers (GEC) to determine learning needs of physicians, in particular, have demonstrated that physicians want programs that have a practical application and are convenient in terms of access and timing (Segrist, 2000). CD-ROM and on-line web modules have been successfully offered by other GECs, with emphasis on interdisciplinary and discipline specific geriatric content that can be customized to conveniently meet the needs of providers in the majority of healthcare settings and locations (Segrist, 2000). Training modules also include pre- and post-tests essential for evaluation.

Because program attendance and effects will likely be enhanced if learner needs are addressed, programs developed by GECs should first be based on the perceived needs of potential participants, and second on emerging or future needs, as yet unperceived or unknown by the target population. (Johnson, Fox & Moore, 1992). While emerging and future workforce needs across all disciplines and for all patient populations will be influenced by global changes occurring in information delivery, healthcare delivery, and education (Molloy, 2005), we can give examples of emergent trends that will specifically affect geriatrics, and thusly geriatrics education. Among them are the following:

1) A geriatric population that will be increasingly composed of Baby Boomers, a demographic that is more health conscious, more demanding, and more technologically savvy than the group of which the current 'elder population' is composed;

2) A population that is increasingly focused on health promotion, exercise, activity, wellness, and positive lifestyle choices;

3) The development of geriatrics care models in which a high degree of workforce sensitization and knowledge around the following concepts are required: what it feels like to be elderly; what it feels like to be elderly and ill; what it feels like to be elderly and ill and alone.

4) New residential patterns for the elderly, such as Naturally Occurring Retirement Communities (NORCS) and communal residences like those of The Greenhouse Project, which add to and alter the concept of 'care site';

5) Policy change that will increasingly seek to address the needs of the elderly.

These and other examples are discussed more fully as rationales in the Recommendations section of this paper.

III. Evaluation Questions

The following questions provided a framework for survey content:

- What are the characteristics of healthcare providers in Maine serving the geriatric population?
- How specialized is the workforce in the area of geriatrics/gerontology?
- What are the specific learning needs of providers?
- What is the preferred learning style of providers?
- What are the obstacles to computer web-based learning?

IV. Target Population

The target population included the broad range of all healthcare providers serving the elder population in Maine. Specific disciplines included certified nursing assistants, case managers, dentists, dieticians, long term care administrators, medical assistants, medical directors, occupational therapists, optometrists, pharmacists, physical therapists, physicians, advance practice nurses, physician assistants, podiatrists, nurses, social workers and speech therapists.

The goal was to include geriatric providers representing major practice settings throughout the state, inclusive of all 16 counties in Maine. Practice settings included primary care, home, hospital, nursing homes, assisted living, mental health, rehabilitation, dental office, clinics, community health centers, and educational settings.

V. Survey Design

A web based survey was used for this study. Content was created based on the literature review, input from key informants, stakeholders, and the pilot sample. Content included demographics, scope of geriatric practice, previous geriatric education, assessment of personal learning needs and interests, perceived learning needs of other providers, preferred learning methods, interest in certification, and access to computer resources.

Design principles for web based surveys were considered based on Dillman's (2000) work. In choosing an electronic design it was essential to assure compatibility across all respondents' computers with consideration given for variations in browsers and software. The design took into account possible limitations on the amount of computer resources required by the finished questionnaire. Screen configurations were clear with a consistent navigational flow. A welcome page with specific instructions for computer actions was provided. Drop down boxes were used sparingly as these tend to create respondent confusion. Only selected questions required an answer prior to electronic submission.

The web design and survey contented was evaluated in a 2 week pilot in March 2004. Maine GEC directors and stakeholders, and healthcare providers known to the researchers, were sent an email with a request to go to the web site to complete the survey. Comments were returned electronically and changes were incorporated into the final questionnaire. Changes included the addition of disciplines, practice settings, and refinement of the 18 learning need content areas. The clarity of survey instructions was also enhanced based on feedback. In general the feedback was very positive in regards to comprehensiveness of survey content and ease of responding electronically. The survey could be completed in less than 10 minutes.

A pen and pencil survey was made available to those providers who did not have computer access or preferred this method. The final survey is presented in Appendix A.

VI. Sample Methodology and Implementation

A convenience sample using a snowball methodology was applied in this survey. Individuals working with the geriatric population were the primary units of analysis.

Individuals were contacted either directly from mailing lists made available to members of the Maine GEC Director's Group or through organizations representing geriatric providers. Contacts were made by phone, email, and facsimile.

Implementation began in April 2004 with the intent to have the survey posted on the web for 6 weeks. Fifty-six organizations and associations were contacted in addition to 321 individuals. Organization/Association

contacts included the following:

- Eighteen professional state associations representing all disciplines targeted in the survey;
- Twelve state organizations/associations representing practice settings targeted in the survey;
- All regional Area Agencies on Aging;
- Other organizations and state departments specializing in elder services including: AARP, BEAS, Maine Alzheimer's Association, Elder Abuse Institute of Maine, RSVP, Mainehealth Partnership for Healthy Aging, Maine Center on Aging, Maine Department of Human Services, and UNE Division on Aging.

In addition, 321 individuals were contacted by email representing all disciplines in the study. Representatives were sought from the 2004 Elder Care Giving Conference, Statewide Independent Living Council, TRIADS, GEC program participant lists, and UNE preceptor contacts.

Individuals were provided written information directing them to the survey web site with instructions for completion. A request to assist with recruitment of additional participants was also included. The last page of the survey included an option for the respondent to provide their demographic information for future contact, if desired. Respondents submitted the surveys electronically directly to the Associate Director for Research where they were stored in a database for future analysis.

Survey information was either emailed or faxed to organizations and associations with a request for it to be shared with other potential participants. Organizations and associations distributed this information in newsletters in addition to sending it by email to members. Postcards were also mailed and distributed to geriatric providers and healthcare settings explaining the survey and directing them to the web site. Postcards were made available at several healthcare conferences in the spring of 2004.

Snowball sampling was further extended with thank you emails sent to all survey participants who provided an email address with their completed survey. With the "thank yous" participants were requested to share the survey web site with colleagues and encourage participation. In all, 164 thank you emails were sent to participants.

Due to the scheduling of spring 2004 conferences and decisions of the Associate Directors and Stakeholders groups the survey remained posted on the web until August 2004. This provided additional opportunity for participation.

VII. Data Analysis

A final total of 286 responses to the survey were received, which included 280 (98%) completed online, and 6 (2%) paper surveys returned by mail. The online web survey allowed data to be downloaded and imported into Excel and SPSS for analysis. The six paper surveys were entered by hand. Analysis included descriptive statistics and proportion analysis to evaluate statewide distribution.

All data were reviewed by the Associate Director for Research and the Research Intern. For some questions there was a category of "other" wherein a respondent could write a response. Using these responses, new categories were created (when there were sufficient responses) or respondents were reassigned to existing categories (for example, a nurse administrator was classified as a nurse). Detailed breakdown of these responses are included in Appendix B.

VIII. Results

PARTICIPANTS

In all, a total of 286 responses were received, which included 63 men (22%) and 222 women (78%) (1 missing). Age of the respondents ranged from 24 to 84 years, with a mean of 48.37 (SD: 10.17). When age groups were created, the distribution was as follows:

- 20–29, n = 13, 4%
- 30–39, n = 38, 14%
- 40–49, n = 80, 30%
- 50–59, n = 112, 41%
- 60–69, n = 24, 9%
- 70+, n = 5, 2%
- Missing, n = 14

Respondents came from all areas of the state and reported a mix of urban (n = 47; 33%), rural (n = 130; 45%), and suburban (n = 62; 22%) residence. Every county in Maine was represented, with two respondents not living in the state. See Table 1 for a breakdown of respondents by county. Using current census data, proportions for each county in the state were created. This was compared to the respondents' county of residence and there were no significant differences, indicating that the respondents did reflect the geographic distribution in the state.

Respondents represented a wide variety of disciplines, with the largest group being nurses (n = 66) followed by social workers (n = 57), and optometrists (n = 20). There were 26 respondents in the "other" category who could not be otherwise classified. See Table 2. Respondents also worked in a wide variety of settings, as illustrated in Table 3.

The respondents had many years of geriatric practice, ranging from 1–50 with a mean of 15.43 (SD: 9.79). Broken into groups, years of experience ranged as follows:

- 1–10 years, 39.2%
- 11–20 years, 32.7%
- 21–30 years, 24.7%
- 31+ years, 3.4%

Table 1. County of Residence

County Name	Number	Percentage	State Percentage
Androscoggin	19	6.64%	8%
Aroostook	29	10.14%	6%
Cumberland	68	23.78%	21%
Franklin	8	2.80%	2%
Hancock	9	3.15%	4%
Kennebec	37	12.94%	9%
Knox	3	1.05%	3%
Lincoln	10	3.50%	3%
Oxford	8	2.80%	4%
Penobscot	39	13.64%	11%
Piscataquis	1	0.35%	1%
Sagadahoc	7	2.45%	3%
Somerset	8	2.80%	4%
Waldo	8	2.80%	3%
Washington	4	1.40%	3%
York	26	9.09%	15%
I do not live in Maine	2	0.70%	N/A

Table 2. Discipline of Respondents

Discipline	Number
Registered Nurse	66
Social Worker	57
Other	26
Optometrist	20
Long Term Care Administrator	19
Advanced Practice Nurse	17
Case Manager	17
Physician	15
Licensed Practical Nurse	10
Speech Therapist	10
Physical Therapist	10
Law Enforcement	8
Medical Director	7
Dietician	6
Occupational Therapist	5
Education	5
Physician Assistant	4
PCA/Homemaker	2
Certified Nursing Assistant	2
Dentist	1
Pharmacist	1
Podiatrist	0
Medical Assistant	0

Respondents also reported the scope of their geriatric practice, as follows:

- 0%–25%, n = 48, 16.8%
- 26%–50%, n = 37, 12.9%
- 51%–75%, n = 64, 22.4%
- 76%–100%, n = 132, 46.2%

Finally, respondents were asked if they were certified in geriatrics. This could be any type of certification, different categories were not included. The vast majority (n = 247; 88.5%) responded no, with only 32 (11.5%) responding that they were certified. They were also asked if they were interested in future certification; to this question, answers were:

- Yes, n = 108, 38.71%
- No, n = 84, 30.11%
- Not sure, n = 94, 33.69%

PRIOR GERIATRIC EDUCATION

Respondents were asked if they had taken a geriatric course in the past year, with the majority replying yes (n = 218; 78.9%). Types of courses varied, with most indicating they took a workshop, seminar or conference. Results are presented in Table 4.

When taking a course, respondents indicated a preference for continuing education credit (n = 157; 58.15%), followed by continuing medical education credit (CME) (n = 46; 17.04%). Forty-two respondents did not need or want credit (15.56%) and 32 respondents would like college credit (11.85%). Interestingly, 205 respondents (73.74%) indicated that they had a professional requirement for continuing education.

GERIATRIC LEARNING NEEDS

Respondents were presented with a series of "emoticons" which they could use to rank their personal learning needs in geriatrics. The emoticon looked like a judge and by using a slider, the respondent could range an interest as "10" (very high interest) to 1 (very low/no interest). Using the emoticons allowed the respondents to quickly rate 18 topics. For the analysis, those items that received a very

Table 3. Practice Setting

Practice Setting	Number
Home Care	61
Nursing Home	58
Assisted Living/Residential	42
Hospital Inpatient	40
Educat. Setting (faculty, student)	31
Hospital Outpatient	28
Primary Care Clinic	25
Community Health Center	24
Other	23
Mental Health	19
Rehabilitation Facility	19
Educat. Setting (clinical practice)	18
Office/Practice	13
Area Agency on Aging	12
State Agencies	5
Social Service Agency	5
Day Care Center	4

Table 4. Type of Offering of Geriatric Education

Type of Course	Number
Workshop/Seminar	159
Conference	128
Work-site Inservice	85
Course for 3 or more academic credits	20
Distance Teleconference	19
Online Course	16
Graduate Degree	13
Other	10

Table 5. Personal Learning Needs

Topic	Ranking
Community resources	151
Geriatric assessment	150
Depression	145
Caregiving	144
Dementia	143
End-of-life issues	139
Health promotion/disease prevention	126
Pain management	122
Social isolation	118
Polypharmacy	113
Elder abuse	107
Knowledge and attitudes toward aging	107
Interdisciplinary practice	107
Chronic disease	106
Process of normal aging	100
Nutrition	83
Cultural issues	70
Substance abuse	52

high interest response were rank ordered according to their ratings. The results are presented in Table 5. Respondents were also asked to rank what they felt others needed to know in terms of geriatric education. The rankings for this question were computed in the same fashion. Results are presented in Table 6.

Overall, the rankings for the two groups were very similar, with community resources and geriatric assessment leading the list for both groups. Nutrition, cultural issues, and substance abuse held the least amount of interest for both.

LEARNING STYLE AND COURSE PREFERENCE

Respondents were asked what type of course they preferred. They could choose multiple options, which is why the numbers are higher than the total number of respondents. Results are presented in Table 7.

The vast majority did indicate a preference to go offsite (from work) to take a course (n = 184; 78.3%). Respondents were asked how far they were willing to travel to take a course. A total of 258 respondents replied that they were willing to travel 1 to 500 miles, with a mean distance of 91.61 (SD: 85.43). In terms of range, responses were:

- 1–50 miles, 41%
- 51–100 miles, 42%
- 101+ miles, 17%

Even though people like to get away to take a workshop or seminar, 224 (80.29%) did reply positively that they would consider taking an online course. To determine if this is feasible, respondents were asked about their computer access. Most indicated that they did have access to a computer at work and at home, as illustrated in Table 8.

Respondents were also asked about availability of Internet access. See Table 9.

Although at first glance is appears that dial-up is most common, if cable modem and DSL are combined (both broadbrand technologies that are available for residential service), then these are more prevalent (n = 162).

Table 6. Learning Needs of Others

Topic	Ranking
Community resources	77
Geriatric assessment	65
End-of-life issues	65
Polypharmacy	61
Depression	60
Caregiving	56
Dementia	51
Health promotion/disease prevention	46
Knowledge and attitudes toward aging	46
Chronic disease	41
Pain management	40
Social isolation	36
Elder abuse	35
Process of normal aging	34
Interdisciplinary practice	31
Nutrition	18
Cultural issues	13
Substance abuse	6

Table 7. Preferred Learning Method

Preferred Type of Course	Number
1 day workshop within driving distance of my home/work	207
1/2 day workshop within driving distance of my home	135
Online by computer	100
Overnight educational/conference at a hotel or conference center	79
1/2 day workshop at my work setting	56
1 to 2 hour inservice at my work setting	56
Pre/post meeting/conference: in-depth educational session	41
Videoconferencing from remote location	36
Other	1

Table 8. Computer Access

Computer Access	Number
Yes - Home	250
Yes - Work	231
Yes - Other (i.e., library)	9
No	1

Table 9. Availability of Internet Access

Internet Access	Number
Modem (dial-up)	109
Cable Modem	97
DSL	65
Not sure	32
T-1 (ethernet)	30

IX. Discussion

Overall, the results supported the conclusions found in the literature: respondents are interested in practical courses that provide content for their clinical practice. Geriatric assessment, community resources, depression, and end-of-life issues are perennial favorites and this survey was no exception. Such a response is positive validation for the directors and stakeholders of the Maine GEC who had expressed similar opinions.

One question that must be asked is, was the sample that responded (n = 286) sufficiently large? This is difficult to answer, since the sampling methodology did not provide a benchmark to compare against; that is, it is not possible to provide a percentage of responses against the total number invited to respond. However, the fact that the sample does represent the geographic distribution of the state on a county population basis does provide one measure of sampling adequacy. Further, the saturation in categories, and the consistency between the perceived personal learning needs versus others learning needs, also adds to the adequacy of sample size. Based on this, it can be concluded that the responses are representative of the target population and can be used for program planning.

At the time this survey was initiated, the Maine GEC had not undertaken previous online data collection efforts so this was a test of the methodology as well as data collection regarding learning needs in geriatrics. Based on the number of surveys received online (98%) and the fact that there were essentially no concerns expressed by respondents about completing the survey, it is safe to conclude that the online survey methodology was successful. This is especially useful information because the online methodology did not incur expenses normally associated with data collection, including photocopying, postage, and data entry. The online methodology was extremely cost-effective and labor efficient in all respects. It is recommended that this methodology be used for future quantitative data collection efforts.

The success of the online survey also supports the finding that many of the respondents would be interested in taking an online course. The fact that they were able to complete the survey with little problem does provide evidence that respondents have access to the appropriate resources, including a computer and Internet access, to allow them to successfully participate in an online course.

X. Recommendations

The target population(s) for the following recommendations include: healthcare providers in acute care settings; long-term care and assisted living facilities; physician practices; organizations that serve the elderly (home healthcare, the Area Agencies on Aging, Alzheimer's Association, etc.); public health and community health workers; oral health workers; mental health workers; and informal caregivers.

Specific disciplines include (as included in the survey): certified nursing assistants; case managers; dentists; dieticians; long term care administrators; medical assistants; medical directors; occupational therapists; optometrists; pharmacists; physical therapists; physicians; advanced practice nurses; physician assistants; podiatrists; nurses; social workers; and speech therapists. However, the recommendations are not limited to these specific disciplines. Respondents to the needs assessment also included health education faculty and students but in smaller numbers than providers. The Recommendations are meant for a broad health workforce that include all these populations.

RECOMMENDATION 1.

Identify and/or develop geriatrics training opportunities that meet the identified needs of healthcare providers, and deliver these opportunities in both preferred and new ways.

Rationale

There is understandable concern about the readiness of

the healthcare workforce at every level to serve those in the emerging Baby Boom demographic bubble, though in many ways this care crisis is already upon us. Providers across a wide spectrum of disciplines are currently serving an increasing number of elders, and serving them without a thorough understanding of this burgeoning patient population. The education/training needs identified by these current providers are wide-ranging, with the top two being community resources and geriatric assessment. Their preference for method of delivery is predominantly via off-site workshops, though 94% of respondents have access to a computer either at home or at work, and replied positively that they would consider taking an online course. The ranking of the top three preferred delivery methods were: 1) 1 day workshop within driving distance of home; 2) 1/2 day workshop within driving distance of home; 3) online by computer.

Strategy 1.1

Develop a geriatrics workforce resource manual.

- Identify geriatrics training and educational opportunities that are currently available statewide, including courses and/or seminars and workshops provided by: 1) colleges and community colleges; 2) health-related organizations that serve the geriatric population, such as the Area Agencies on Aging, home healthcare agencies, Alzheimer's Association, etc.; 3) and individual healthcare systems and hospitals.
- Identify, provide contact information for, and summarize the services of all geriatrics-related healthcare and social service organizations statewide. List alphabetically, and cross-reference by location (county) and discipline (e.g. mental health, direct care, etc.).
- Make this manual available electronically as a page on the Maine GEC Web site, and as a link from other health and/or education related Web sites such as that of the Maine Area Health Education Center (AHEC).

Strategy 1.2

Work with the state's colleges and community colleges, organizations that serve the elderly, and healthcare systems and hospitals, to encourage the development of new training and educational opportunities (courses, seminars, workshops, etc.). Because the Maine GEC monitors change in the delivery of healthcare to the elderly, these new training and education opportunities should reflect practice or paradigm change (See Recommendation #2).

Strategy 1.3

Link current providers to training and education through both preferred and new methods. These methods should include:

- Half and full day off-site workshops (preferred by respondents);
- Interdisciplinary team training;
- Mentoring of individual providers by geriatricians or others trained in general or specific areas of geriatric care;
- Distance learning (ie, online by computer). It is not entirely clear what the respondents' interpretation or understanding of current distance learning modalities actually are. Older methods include teleconferencing by a group from a single location, either simply via phone or via telemonitor, and/or early generation online courses that were somewhat isolating and static. The newest PC-based digital delivery methods are interactive, conducted in real-time with the possibility for synchronous and asynchronous discussion, result in vigorous and national on line student communities, and provide students the opportunity and ability to interact with professors and each other via listservs and real-time visuals.
- A geriatric training/education e-mail alert system that will automatically send information concerning new opportunities or changes to those who sign up. Again, this service could be housed on the Maine GEC Web site.

RECOMMENDATION 2.

Encourage educational content that leads to a better understanding of the elderly.

Rationale

The elderly present not only unique health challenges for healthcare professionals, they also present cultural challenges. The old are often chronically ill, often emotionally isolated by their own illnesses and the illnesses and deaths of friends or family, and increasingly marginalized by a youth obsessed society. They are no longer seen as productive and valued members of society. In healthcare settings, where they require more care

and longer physical and social contact, they are often perceived by those who do not understand them as being nuisances.

But healthcare settings are not the only places that providers encounter the elderly. The elderly no longer follow a trajectory of homecare, to assisted living facility, to long term care facility, to death. A number of different community-based aging in place models have arisen, such as the naturally occurring retirement community (NORC), where people age in the homes in which they have lived for a long time, or the Greenhouse Project, in which elders live communally in a large home. Considering disability trends in the elderly, this demographic repatterning will increase the need for geriatrics trained home health providers, personal aides, and informal caregivers (Molloy, 2005)

The Baby Boomers present another set of cultural challenges to geriatrics providers. They are more technologically astute and health conscious than their predecessors. According to a recent national study, Internet users aged 55 and older were 42.7 percent more likely "than any other age group to check health information online" (NTIA, 2002) The Boomers are becoming increasingly Internet savvy, particularly in searching for health information and community services on the Web. "The importance of the growth of Internet access and use by healthcare's largest demographic patient group should not be underestimated. In the past, older adults in particular were passive consumers of medical advice, relying on the wisdom of the medical team to make decisions. They are now developing skill in surfing the Internet and are increasingly in a better position to be more active in their own healthcare. It remains to be seen how providers will interact with these newly savvy seniors" (NTIA, 2002).

In Maine, the elder population is changing in another critical way. Although Maine remains one of the least ethnically diverse states in the nation, the past decade has seen an influx of refugees and immigrants into its cities and towns, particularly into Portland and Lewiston/Auburn. Over 50 different languages are spoken by children in Portland schools alone, which is an indication of the cultural diversity these children represent. New Mainers come from Somalia and other African nations, from countries that were once part of the old Soviet bloc, from Asia and the Pacific Rim, and from many other lands. Maine is also home to a large Native American population that is served in tribal communities by federally funded health centers. When accessing healthcare, language is not the only barrier these ethnic populations face. Beliefs and expectations that are grounded in their various cultures may not be understood or appreciated by health providers who are 'outsiders.' The health workforce must evolve to meet the geriatric needs of this population.

Strategy 2.1

Encourage and support training methods designed to sensitize the health workforce to what 'being old' actually means. Methods to be employed should include:

- Role playing experiences;
- Understanding through the Arts initiatives, particularly through participation in Literature in Medicine programs, and national journaling, storytelling, and archival projects;
- Intergenerational mentoring and volunteering opportunities (such as teaching an elderly person to access healthcare information via the Internet, etc.)

Strategy 2.2

Encourage geriatric training and education in non-traditional, non-clinical venues. These venues should include, but not be limited to:

- Experiential learning sites (such as teaching nursing homes, elder housing that is based on campus, etc.);
- Naturally occurring retirement communities (NORCs) and other alternative living settings (such as Greenhouse Project residences);
- In the home (through home health rotations);
- In cyberspace, on sites designed for, and frequented by, the elderly (such as CyberSeniors.org, AARP, etc);
- Community-based programs that serve the elderly, such as Meals On Wheels, RSVP, Partnership for Healthy Aging, the regional Agencies on Aging, elder law projects, and others.

Strategy 2.3

Provide training that sensitizes the health workforce to, and educates providers in, the delivery of culturally appropriate care.

Strategy 2.4

Because the aging health workforce is itself a problematic component of the current massive demographic shift, develop education and counseling for providers to address their own aging issues (ie, a 'first patient' concept, in which a provider uses himself or herself as their own first geriatric patient).

RECOMMENDATION 3.

Provide a central source of continuous information around changes in geriatrics policy, workforce, standards of care and new practice models.

Rationale

The concept of lifelong learning is particularly applicable to those in healthcare, where change is constant. Driven by demographic imperatives, the evolution of geriatric medicine is no exception. While workshops and other educational courses provide basic knowledge or competencies, providers still need ongoing information to retain their professional edge.

Strategy 3.1

Develop and post a monthly Internet based newsletter with updates and stories on geriatrics policy, workforce, and standards of care. House this newsletter on the Maine GEC Web site, and as a link from other health and/or education related Web sites such as that of the Maine Area Health Education Center (AHEC).

RECOMMENDATION 4.

Support geriatric training programs for informal caregivers.

Rationale

A large percentage of day-to-day care for the elderly currently falls, and will continue to fall for some time, on the shoulders of informal caregivers. Informal caregivers are family members, usually elderly spouses or children (often daughters), who provide day-to-day care of ill, infirm, bed-ridden, or housebound elderly. The Baby Boomers have a larger average pool of children than the generation that preceded it, and as informal caregivers, this pool of children (and spouses) forms a substantial component of the geriatrics health workforce (Molloy, 2005).

Strategy 4.1

Identify and promote informal caregivers training and support programs, such as the those offered by, or through, Partnership for Healthy Aging, the Area Agencies on Aging, and other organizations.

XI. Conclusion

Providing healthcare to the growing number of elderly is complicated by rapid change in the very nature of this population. The elderly are embracing new residential patterns, they represent increasing ethnic diversity, and they use the Internet to find healthcare information and community resources. As the population continues to age, the numbers of elders requiring knowledgeable health providers—providers who base their practice on best evidence and who embrace a philosophy of successful and healthy aging—will continue to increase. The needs assessment has provided valuable insight into the steps that must be taken to increase the geriatric competencies of the healthcare workforce.

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APPENDIX 2 - GEC NEEDS ASSESSMENT

Maine-University of New England
Geriatric Education Center
MUNEGEC

Needs Assessment
Spring, 2004

Thank you for your interest in the Maine-University of New England Geriatric Education (Maine GEC) Center Needs Assessment. The purpose of this survey is to assess the educational needs and preferences of healthcare professionals and others who provide services to elders in Maine. Your participation in this survey will assist MUNEGEC staff to develop educational
programs that are relevant and useful to you in your work.

The survey should only take about 10 to 15 minutes of your time to complete. Please mark your answers in the appropriate spaces. You may also add written comments.

Please return the survey to:

Leslie H. Nicoll, PhD, RN
Associate Director for Research, Maine GEC
10A Beach Street, Suite 2
Portland, ME 04101

If you have any questions about the survey, please call Leslie directly at 207-553-7750.

This survey is also available online. Completing the survey online allows your answers to be
recorded and automatically transmitted to the Maine GEC Research Office. To complete the survey online, go to:

http://www.mainedesk.com/gec_needs.htm

(Please note that this URL is case sensitive. Make sure all the letters are typed lowercase.)

Thank you in advance for your time and participation in this important survey.

Sincerely,

Leslie H. Nicoll, PhD, RN
Associate Director for Research
Maine GEC

1. Which of the following best describes your profession? (check all that apply)

	Advanced Practice Nurse		Optometrist
	Case Manager		Pharmacist
	Certified Nursing Assistant		Physical Therapist
	Dentist		Physician
	Dietician		Physician Assistant
	Licensed Practical Nurse		Podiatrist
	Long Term Care Administrator		Registered Nurse
	Medical Assistant		Social Worker
	Medical Director		Speech Therapist
	Occupational Therapist		
	Other (please specify):		

2. Are you: _____ Male _____ Female

3. What is your age? __________

4. Please select the practice setting that best describes the majority of your practice. (select one response only)

	Hospital Inpatient		Community Health Center
	Hospital Outpatient		Educational Setting (faculty, student)
	Home Care		Educational Setting (clinical practice)
	Dental Office		Rehabilitation Facility
	Nursing Home		Mental Health
	Assisted Living/Residential		Primary Care Clinic
	Other (please specify):		

5. Which of following best describes your practice location?

_____ Rural ____ Urban _____ Suburban

6. Select the county where you live.

	Androscoggin		Oxford
	Aroostook		Penobscot
	Cumberland		Piscataquis
	Franklin		Sagadahoc
	Hancock		Somerset
	Kennebec		Waldo
	Knox		Washington
	Lincoln		York
	I do not live in Maine.		

7. How many years have you been providing services to the geriatric population? ____

8. What percentage of your practice is comprised of persons over age 65?

	0%—25%		26%—50%		51%—75%		76%—100%

9. Do you have certification in Geriatrics or Gerontology? _____Yes _____No
10. Would you be interested in receiving a certificate in Geriatrics?

______Yes ______No _____Not sure

11. In the past year, have you participated in at least one educational offering focusing on geriatrics?

_____Yes _____No

12. If yes, what type of offering was it? (check all that apply)

	Workshop/Seminar		Graduate degree
	Conference		Online course
	Worksite inservice		Distance teleconference
	Course for 3 or more academic credits		
	Other (please specify):		

13. Please indicate your interest in each of the following geriatric educational topics:

Topic	Very interested	Somewhat interested	Neutral	Low interest	No interest
Normal aging process					
Knowledge and attitudes about aging					
Health promotion and disease prevention					
Geriatric assessment					
Community resources					
Caregiving					
Elder abuse and neglect					
Dementia					
End-of-life issues					
Pain management					
Depression					

Social isolation					
Polypharmacy					
Nutrition					
Chronic disease					
Substance abuse					
Cultural issues					
Interdisciplinary practice					

14. Please list three (3) geriatric subject areas in which you would most likely participate in an educational offering:
    A. ____
    B. ____
    C. ____

15. From the following list, please select the three (3) topics you believe are most needed for all geriatric healthcare providers in Maine.

	Normal aging process		Elder abuse and neglect
	Knowledge and attitudes about aging		Dementia
	Health promotion		End-of-life issues
	Geriatric assessment		Depression
	Community resources		Social isolation
	Caregiving		Pain management
	Polypharmacy		Nutrition
	Chronic diseases		Substance abuse
	Cultural issues		Interdisciplinary practice

16. Does your profession require continuing education credit for continued licensure or certification?

    _____Yes _____No

17. When taking a course, what type of credit is important to you?

	CME		College credit
	CEU		None

18. When participating in an educational offering, what location do you prefer?

    _____Onsite at work _____Offsite

19. What is your preferred learning style? (Select your top 3 choices)

	Online by computer
	½ day workshop at my work setting
	1 to 2 hour inservice at my work setting
	Videoconference from remote location
	½ workshop within driving distance of my home/work
	1 day workshop within driving distance of my home/work
	Pre/post meeting/conference: in-depth educational session
	Overnight conference at a hotel or conference center
	Other (specify):

20. How many miles are you willing to drive for an educational offering? ____________

21. Do you have consistent access to a computer?

	Yes, at home
	Yes, at work
	Yes, somewhere else (i.e., library)
	No

22. Would you participate in online educational offerings?

_____Yes _____No

23. What type of Internet access do you have?

	Cable modem
	DSL
	Modem (dial up)
	T-1 (Ethernet)
	Not sure

24. Please use the space below to identify any other comments you might have about geriatric educational offerings in Maine.

Thank you again for taking the time to complete this survey. Results will be available upon request. If you would like to be added to the mailing list of the Maine GEC, please put your contact information here:

Name:____

Address:____

City, State, Zip:____

E-mail address:____

Please return your completed survey to:

Leslie H. Nicoll, PhD, RN
Associate Director for Research, Maine GEC
10A Beach Street, Suite 2
Portland, ME 04101

APPENDIX 3 - Analysis of "Other" Categories

77 respondents designated themselves as "others"

Of these 22 were members of professions targeted as designated discipline categories in the survey:

- 11 nurses (14%)
- 3 Physicians (4%)
- 3 Social Workers (4%)
- 2 Speech Therapists
- 1 CNA
- 1 Physical Therapist
- 1 Occupational Therapist

Of the remaining 55 respondents in the "other" category the following areas were represented:

- 11 Administrators and managers in a variety of settings
- 8 Law Enforcement Workers
- 5 Education (without specific discipline noted)
- 3 PCA/Homemaker Schedulers
- 2 Adult Day Care Providers

The remaining "others" were isolated specialties

Analysis of Practice Setting "Other" Category

82 respondents designated their practice setting as "other"

The following settings were represented:

- 12 Area Agencies on Aging
- 12 Office settings including physicians and optometrists
- 11 Community settings
- 8 Home care/hospice settings including LTC and home based care
- 5 Social service agencies/departments
- 5 State agencies
- 4 Day care centers
- 4 Skilled/sub acute facilities

The remaining "others" represented a variety of settings