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Disseminating Health Information for Rural Seniors in Gilliam County, Oregon

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Anne Hepburn

Chris HoffmanHill

Jenny Gapp

Emporia State University

#### Abstract

In this paper, the authors profile the library and information services of the small rural county of Gilliam, Oregon. An assessment of methods and resources, as well as the current population's Information Transfer Process, reiterate the need for improved information services, specifically (but not limited to) health information resources to a dispersed and aging population. By studying the community profile and their Information Use Environment (IUE), we are able to prescribe programs that will better, and more effectively serve seniors in a dispersed rural environment.

Disseminating Health Information for Rural Seniors in Gilliam County, Oregon
Critical assessment of methods and resources

We understood some rural issues before we began, by using the CARI (Community Analysis Research Institute) model for community analysis and Hale's Community Analysis Process tools (<a href="http://www.skyways.org/pathway/profile.html">http://www.skyways.org/pathway/profile.html</a>) we gained a deeper appreciation for the challenges that face rural residents. The Community Analysis Process tools include four components: demographic data, walkabout impressions, community businesses data and focused conversations. From US Census, Oregon cities (city-data.com) and NCES (National Center for Education Statistics) data we could draw comparisons of economic conditions, age dispersal, education levels, population density and more between familiar urban areas and our target population in Gilliam County, Oregon. These statistics were distressing, however, when coupled with the 'walkabout' impressions and insights gleaned from perusing the websites of the cities, schools, chamber of commerce, libraries, businesses, and the Times-Journal newspaper vitality was clearly evident. Individuals who would be valuable gatekeepers and focus group participants were identifiable. Due to distance and lack of resources we weren't able to conduct

focus group interviews; we substituted results from two research projects conducted by OHSU (Oregon Health and Science University) on rural seniors' information needs for focus group conversations. Their results were based on surveys, observations and interviews of rural health care providers and recipients in two different rural Oregon counties. Additionally, we contacted the librarians in Gilliam County and heard back from one, her response mirrored the picture we had formed of a dismal financial outlook combined with forward-looking, aspirations for change and improvement.

We understand that in choosing to explore the underserved rural population, while living far removed from the community, the essential community input component was limited, however, the nature of the information available on the internet today: local newspapers, city council minutes, historical narratives, promotional chamber pieces and email, helped bridge that gap for the needs of this project. Being sensitive to the perspective of the author is important in evaluating the accuracy of the information delivered online, for instance the chamber of commerce website was robustly positive in a marketing sense, but the story of the community volunteering together to restore Hotel Condon and letters to the editor thanking the community for support during a recent illness speak of actual community cohesiveness. Our literature review was also impacted by the nature of rural issues; because rural residents are small in geographic density and less powerful economically they don't receive the attention that more visible, concentrated populations do. We searched databases, the Center for Rural Librarianship, Rural Libraries journal, WebJunction and OHSU's center for Rural Health to access research literature on information transfer and use in rural areas. We found we needed to broaden our search to information seeking and human information behavior more generally and then merge that with rural and senior characteristics obtained from the rural literature. To transform these

theoretical understandings into an effective program implementation, a librarian would need to actively participate in the community, network relationships among agencies and respond to individuals' input and feedback.

## Description of rural seniors in relation to ITP

Libraries exist to serve their community. Tax dollars fund library collections and materials pertinent to the population. Within every community there are people who slip through the cracks, as it were, and are untouched and unaware of library programs that could be enriching. Reaching these "underserved" populations is a challenge that libraries face when building collections and performing outreach. In order to get the proper information to underserved patrons and members of the library community, we must assess the characteristics that qualify them as underserved. Gilliam County, in north-central Oregon presents a compounded challenge: many of its residents are scattered throughout the county and many of them are elderly. Most of the county's senior residents are without a computer, or at the very least, lacking computer and/or internet searching skills. Faced with this challenge, it is the library's mission to package information to match learning styles and educational methods of everyone in our community—including those who are incapable of voicing their information needs.

An aging population spread throughout the county is in need of up-to-date health information. What are the prevalent illnesses in this population? Is Alzheimer's afflicting our seniors? Would they benefit from information about the latest joint-replacement surgeries? In order to determine the best way to effectively disseminate health information, it becomes important to understand the community. Conducting "open-ended interviews and focus groups can be used to understand the networks involved in the dissemination process (McConnell 10)". In other words, find the gatekeeper for the community. Gatekeepers are vital in determining the

ways through which information already travels in the rural community. They are trusted members of the community who are able to liaise with library and health professionals so that they better know who needs what information. In Gilliam County, it may be a pastor at a local church, a nurse at the nursing home in Arlington, or even a waitress at the diner in Condon. In order to better serve our population, it is important to assess the Information Transfer Process (ITP) currently in place. In rural communities, these processes are existing methods of information dissemination that can be observed and utilized to get health information to remote areas. Additionally, "people engage in active and passive information seeking behavior throughout their daily lives relating to activities from the seemingly mundane tasks of getting weather or sports information to the extremely serious actions of researching immediate health concerns" (Hargittai 15). Whether it's seeing one's parents displaying the early symptoms of dementia, or hearing about a fellow parishioner at church breaking her hip in a fall and wondering if such injuries are common, the information need is present. How do we fill in 'the gap'? A better informed community is a healthier community. As library professionals, we must know our population and repackage the information vital to the community in a way that they can utilize it.

# Proposed and improved programs and services in relation to IUE

Senior citizens are generations apart from the technology revolution. Growing up during the Depression and coming of age during the Second World War, "The Greatest Generation" values the meaning of a handshake more than the meaning of a text message. While their knowledge system is rooted in the tradition of hierarchical western thought, rural seniors are simultaneously situated within a specific community and subject to the cultural and indigenous values of place. In Gilliam County that place is linked to agriculture. The state's fourth largest

producer of wheat (95,584 acres), 95% of the county is farmland (zoned as agriculture), with an average size of 4,474 acres, the largest average in the state in 1997 (Loy, 2001). Acres not devoted to the Columbia Plateau's dryland wheat farms provide grassland for beef cattle and some hay production. In examining the four components of the Information Use Environment (IUE): knowledge, political, economic, and cultural systems; it is possible to determine an approach of best practice for planning, implementing, and evaluating rural health information services for seniors.

#### Knowledge System

The nature of a farming community as a knowledge system in the modern world is one fraught with stereotypes. Stories of corporate farms abusing cattle, pesticides poisoning groundwater, and reports of toxicity and disease from E. coli to bird flu, are more reported in mainstream media than are movements toward sustainability and realism. Media that do portray accurate vignettes of modern farm life, like *The Capital Press* (an agricultural newspaper serving California, Oregon, Washington, and Idaho), are known primarily to those with ties to the industry. City dwellers, whose knowledge systems generally lean more liberal than conservative, often experience farm animals only in the context of zoos, next to giraffes and the monkey house. A lack of liberalism in politics, as interpreted by many residents of metropolitan counties, is equivalent to a lack of education. Farming is something pioneers did, not something requiring a professional degree, or even relevant to a technology driven society. Ironically, the conservative perspective is often looked upon intolerantly, if looked upon at all. "Bumpkin," and "hillbilly" may be antiquated terms, but nonetheless illustrate a fundamental division and misunderstanding between urban and rural knowledge systems.

### Political System

In examining the political system of the region and contrasting it with that of metropolitan counties it might be simplified into terms of "country mouse" versus "city mouse." While partisan opinions are of course more complex than that it is possible to find some general distinctions between Gilliam County and the Willamette Valley, where the majority of Oregon's population resides. In 2000, 53% of Gilliam residents voted ves on state ballot measure number nine in 2000, denying legal protection to homosexuals; and places a lower value on domestic and mechanical arts. Traditional family values are further reflected in the fact that no gay or lesbian households are reported in the county. The city of Condon, serving as a microcosm of the county, reports only 3.5% of households contain unmarried partners (U.S. Census Bureau, 2007). Even recreation is politicized: in 1994, 68% of Gilliam voters weighed in on ballot measure number 18 to maintain allowances for hunting bears and cougars; meanwhile, the majority of metropolitan counties west of the Cascades resoundingly favored restrictions on hunting (Loy, 2001). The political values of Gilliam County are also apparent in the 2004 Presidential Election results. The Bush/Cheney ticket received 66% of the vote, with Kerry/Edwards at 33% and third party candidates receiving only 1%. The political atmosphere of the region distinguishes itself just as likely to play a role in the democratic process and write letters to the editor of the *Times*-Journal (the local newspaper based in Condon) as the rest of the state. Whether they would vote for a library levy would depend on the strength of the library's campaign and marketing of services prior to a vote.

#### Economic System

While the latest technology is adopted in the inner city to engage urban youth, and computer classes are offered to the suburban elderly at local community colleges and senior

centers, rural seniors are left out due to the hardship of physical location and subsequently, it's economic monoculture. For as much as the land is devoted to agriculture, the total revenue it brings to the state's economic plate is one of the smallest for farm and ranch producing counties. Economics are largely dependent on the geography of the county and just as there isn't much diversity in the landscape. A traditional farming economy with little room for growth or diversification contributes to the stagnation of the community and the loss of younger generations to other counties and states with more attractive economic venues. Without proper funding informational programs and services simply don't have the tax base to flourish as they do in metropolitan counties with larger populations and economic growth. The median household income for residents of Gilliam in 2004 was \$41,993 while in Multnomah County the median was \$42,344. The difference doesn't appear to be much, except when considering there are approximately 679,539 more residents that pay taxes in Multnomah. Only two libraries exist in Gilliam (Gilliam County Library in Condon, and Arlington Public Library in Arlington), with less than five public access computers available between them. Multnomah County, on the other hand, has a state of the art library system with multiple branches and a web presence infiltrating public library websites in other counties. In Eastern Oregon, including Gilliam County, few public libraries have funds for community programming, with "several operating annually at less than \$15 per capita [per year], or less than the cost of one hardcover book. The distressed regional economy, sparse population and property valuations are all causes for extremely limited funding for the region's public libraries" (Craig, 2007; Libraries of Eastern Oregon, LEO). While Gilliam County Public Library technically has a library website, it is in its infancy, made possible only by a grant through the US Institute of Museum and Library Services in conjunction with the Oregon State Library in Salem, providing, "a free web-hosting solution for public libraries in Oregon" (Gilliam County Library).

#### Cultural System

Senior citizens, living in rural (largely non-metropolitan) counties such as Gilliam, are subject to additional division from the mainstream, compounding their likelihood to be overlooked and thus provided with inadequate informational services. The elderly are hidden in popular culture, a non-entity relegated to a grandmother's wisdom in folk tales, or the occasional exploits of a grandfather's service in foreign wars. A host of serums, lotions, and creams attest to the fears of aging, and programs such as PBS' Caring for your parents, wrestle with the decision of millions to 'put away' the elderly in nursing homes, hospices, and retirement facilities. "Another common pitfall is the lumping of all persons over an arbitrary age" (Sherman, 1988) demonstrating a lack of understanding and sensitivity for the nuances of the age group; nor are distinctions often made between chronological age and cognitive. According to Sherman, "Research indicates that people usually do not perceive themselves to be elderly until they are 75 or older." Aging is not culturally attractive, nor is it respected as a particular knowledge system within mainstream culture. While informational programs and services on consumer health do not necessarily discriminate against the elderly on the basis of having wrinkles, the bulk of consumer health information for rural seniors is discriminatory in that web resources, hailed as a revolution in information service, are not as easily accessible to the societal group furthest removed from the revolution. Furthermore, technological infrastructures have been slower to develop in non-metropolitan regions and senior citizens have hardly been the target group for the latest techno-gadgets. Gains have been made, and even video games like Wii have recently received notoriety as providing health benefits to the elderly. A recent article in The Statesman

Journal claimed, "almost as important as the physical benefits are the mental benefits" (Lynn, 2008). The median age of Gilliam residents has increased from 33.6 in 1980, to 37.8 years in 1990, to 42.8 years in 2000 (U.S. Census Bureau, 2007). As the median age increases, so does the need for easy access to consumer health information. For comparison, 10.6% of Multnomah County's population is composed of persons 65 years and older while Gilliam County has 22.1%; the state average is 12.9%. As a result, Multnomah County has more money for fewer elderly residents, and Gilliam seniors are at a disadvantage due to fewer residents as a whole. *Programming* 

As there are no existing programs targeting consumer health information for rural seniors in Gilliam County, there are endless possibilities for the establishment of such information services. To begin with, basic compilations of region specific information should be made available in the form of brochures, bookmarks, primary sources from collaborating health agencies, web and bibliographies. Print collections should continue to seek out relevant and reviewed periodicals and books on senior health. Arlington and Gilliam Public Libraries are extremely limited by lack of adequate staffing and funds, but through the utilization of volunteers and consortia such as SageCat (a consortium of 76 libraries in Eastern Oregon (school, public, and academic) and LEO (a consortium of 47 public libraries), it is possible to develop a body of work marketable to the senior community. Gilliam County Public Library's yearly expenditures total \$30,225.46, derived from disparate sources, about \$16,000 of which goes toward the less than half time single staff member, who is only able to keep the doors open for 19.5 hours a week. In an assessment funded by the Oregon Legislature, "Adult programming was cited as one of the highest needs by nearly all of the [LEO] libraries" (Craig, 2007). A successful partnership with Oregon Museum of Science and Industry (OMSI) brought LEO to

the attention of the Smithsonian American Art Museum via a mention on National Public Radio.

By emphasizing the accomplishments of other programs, and demonstrating need for new projects such as rural health, it is possible to garner support on both local and national levels.

To the north, Hermiston Public Library has implemented "eye-catching vans for seniors" and LEO's chair, Jo Cowling, claims that the organization is not just about libraries but "livability in all communities" (Craig, 2007). The concept of the bookmobile then, can be expanded into a 'livabilitymobile,' traveling to shut-ins, and places such as Summit Springs Village Assisted Living Facility in Condon. Working with SageCat could produce 'WheatPicks' in the manner of NetFlix, mailing home ILL titles and other consumer health information as requested. A health fair held in conjunction with an established community event, such as at a local grange, church, or Lion's club, also has the potential to bring a lecture series or instructional seminars to the community in collaboration with the Gilliam County and Arlington Medical Centers, Oregon Health Science University's (OHSU) Office of Rural Health, the State of Oregon's Department of Human Services, and Mid-Columbia Medical Center (MCMC) located west of Gilliam in The Dalles. MCMC already hosts an annual health fair and has recently included "mini-sessions on surfing the Internet for health information; handouts contain[ing] a current list of recommended health Websites, arranged by subject...and fifteenminute health lectures" (Spatz, 2000). By using MCMC and The Planetree Health Resource Center as both an example and as a collaborative partner, it is possible to develop a health fair that foments information (and food) specifically for Gilliam County. Information packets, developed by both resource center staff and medical center nurses, also serve as an example of repackaged information. By adopting the packet approach and individualizing if for patients, MCMC claims it "is committed to serving its patients' long-term best interests by providing

them with the tools to make sense of their illnesses, communicate effectively with health care providers, and encourage self-change for better health" (Spatz, 2000). Likewise, providing Gilliam County residents with such tools increases Cowling's community "livability" level. The Gilliam County Fair might be one venue at which to debut a local health fair.

Another possibility is collaboration with Gilliam's two school districts: Arlington 3 and Condon 25J. The Honkers (a reference to the Canadian Goose) and the Blue Devils respectively have small student populations (about 70 at Condon High and 57 at Arlington), but they do have access to technology, and Arlington High School's website is complete with a school library web page linking to L-Net (online reference chat with librarians). The school website is created and maintained by "Honker Tech," a class offered at the high School. The school library's parent link leads to a site on family health and health news, while in another section the library has compiled links to multiple search engines and information on how to search the web. The latter could be used as a resource for students who partner with seniors in order to introduce them to online searching. Honker Tech could invite seniors from the community to participate in a 'webinar,' or mini session on how to surf the Net, focusing specifically on consumer health information. The partnership could also work to improve the list of links on consumer health, providing the community with an additional portal to current information. The National Library of Medicine's (NLM) consumer health database, MEDLINE*plus*, is one such example of the best current information. "Health is a top-ten topic area...a significant (but not precisely known) percentage of patrons seek health information at the library" (Wood, 2000). Wood goes on to say that the number of searches on MEDLINE plus has increased nationally from seven million to more than 220 million—and these statistics are eight years old. In a yearlong pilot project, NLM assessed "the role of public libraries in providing health information to the public" (Wood). One of their

findings was that "The most successful outreach programs reportedly were those devoted to a specific disease or condition." This finding highlights the importance of soliciting what health topics seniors are interested in. Also noteworthy was that, "some public libraries, especially smaller, more rural, or less economically advantaged libraries, seemed to benefit significantly even from modest resources for enhanced health-reference materials or Internet-accessible computer terminals." Funding of any kind for Gilliam County would be an improvement.

Honker Net also includes a link to the North Central Education Service District (NCESD), which in turn provides information on the Frontier Learning Network (FLN), mobile classes that provide high school and college credit for students. A key partner of FLN, and stakeholder in rural health is the Northeast Oregon Area Health Education Center (NEOAHEC). This group is primarily interested in recruiting and retaining health care professionals, but could play a role in advocating for rural health information for seniors as they have provided grant opportunities for FLN. By providing a link in networking with students of the health care industry interested in community events that cater to disseminating information to seniors, the NEOAHEC, along with Eastern Oregon University (EOU) and Libraries of Eastern Oregon (LEO) could dramatically increase the quality and quantity of health care education.

Perhaps the most vital part of programming after dissemination is whether or not patrons find the information packages useful. Dissemination is not enough—diffusion must also take place in order for a successful communication transaction to occur. Depending on the senior information seeker's age, socioeconomic status, education, cognitive capacity, and personal investment in the topic—results will vary. In order to maximize the potential for communication to occur, the information specialist must quite literally be a "compassionate collector" of human variables. Collecting evidence through the reference interview is one thing, listening is quite

another. Rural seniors in Gilliam County run the gamut of variables and it remains to be seen whether "information offered to citizens through the mass media is infinitely more efficient than the one given to them by the official health political campaigns (Ginman, 2000). Ultimately people have to care about the information, but the "care" factor can only go up when librarians take the time to incorporate principles of information literacy along with the information itself. Acting as a liaison between foreign doctorspeak and impersonal tools such as the Internet, librarians have the power to "transform aberrations" and "influence knowledge structures" (Ginman) existing within the greater network of human communication.

#### Conclusion

Providing library services to rural seniors goes beyond the repackaging of consumer health information, indeed it goes even beyond the traditional definition of service, instead acting as a public forum or marketplace of information where ideas are aired out, examined and strengthened by the input of concerned community members. Taking pride in the collective knowledge of a specific community and respectfully engaging differences is essential to seeking the greatest possible input and to value individual contributions to the group. Ultimately, the librarian also has to know when to let go. Providing informational services requires risk, commitment and perseverance, but it also requires the sensitivity to the sense of empowerment already existing within a community.

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