

# Importing Dementia Care Mapping

## *Historical Use of Dementia Care Mapping in the United Kingdom and Implications for Dementia Care Mapping's Use in the United States*

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This study addresses the development of dementia care mapping (DCM) in the United Kingdom and its implications for use in the United States. The *aim* is to understand what factors have facilitated and blocked the use of DCM in the United Kingdom and how these factors may be relevant to DCM's use in the United States. Data include in-depth, semistructured interviews conducted with key leaders in the DCM community. Using a grounded theory approach, 6 themes emerged from the data related to the development of DCM; training experiences, characteristics of individual *mappers*, environmental characteristics, the DCM impact, and the international development of DCM. Key concepts have been identified, each with essential implications for the use of DCM in the United States.

**Key words:** Alzheimer's disease, dementia, long-term care, qualitative research

**D**ementia care mapping (DCM) was developed as a tool to monitor and promote the continuous improvement in the quality of care for people with dementia. Tools such as DCM are necessary to achieve the best possible dementia care practice, because individuals with dementia are often vulnerable and unable to easily identify or express their own care needs. The first DCM course was held by the Bradford Dementia Group (BDG) in 1992.<sup>1</sup> Since 1992, DCM has spread rapidly with over 6000 *mappers* trained worldwide.<sup>2</sup> Since its introduction in the United States, more than 600 Americans have been trained in DCM. Similar findings have been noted by Kasayka (oral communication, 2006).

The *purpose* of this study is to address the historical development of DCM in the United Kingdom and implica-

tions of its use on people with dementia in the United States. More specifically, the *primary aim* of this study is to better understand the attributes that have affected the use of DCM in the United Kingdom and how those attributes, both facilitators and barriers to DCM use, may be relevant to DCM's use in the United States. Attention to these findings may help guide the effective dissemination and use of this tool in the United States.

### BACKGROUND

In the United Kingdom, DCM is an accepted and highly regarded method for assessing the quality of dementia care in residential, nursing home, and adult day care center

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settings. On the basis of the philosophy of person-centered care, DCM promotes a holistic approach to care that centers on maintaining the personhood of individuals with dementia. The core essence of person-centered care is that personhood is a socially created entity that is established through the actions of others who give all people, regardless of abilities or disabilities, respect and status as individuals.<sup>3</sup> Person-centered care is considered state-of-the-art care, which contains 4 features: (1) valuing people with dementia and those who care for them, (2) treating people as individuals, (3) viewing the world from the perspective of the person with dementia, and (4) providing a positive social environment for the person with dementia to better experience well-being.<sup>4</sup>

As an observational method, DCM entails close examination of individuals with dementia while coding the behaviors of these individuals with dementia and their affective responses during an extended period of time. This period of time is referred to as a *mapping* session. These recorded codes are later analyzed, interpreted, and reported back to long-term care staff to be used to develop action plans to promote continuous improvements in their dementia care practice.

There are 4 key components observed in DCM. The first is the range of behaviors each person with dementia is engaged in during the period of observation. Each behavior is coded according to a behavior category code (BCC). For example, eating or drinking is coded *F* for food. Singing is coded *E* for engaging in an expressive or creative activity. Sleeping is coded *N* for sleeping, dozing, or being in “the land of nod.” Second, the level of well-being during each observed behavior is recorded. This is coded numerically and scores range from +5 to -5 and are known as well- or ill-being (WIB) values. Mappers observe, for example, if a person appears happy, sad, distressed, or relaxed. The third aspect of care that is recorded by mappers is any incident that may cause distress or anxiety for the people with dementia who are being observed. Referred to as personal detractors, these incidences capture details of the events that may have a negative effect on a person with dementia. For example, a staff member might label a person with dementia in a dehumanizing way by referring to them as a “feeder” (someone needing assistance with eating). A volunteer might address residents as “sweetie” or “baby,” thereby infantilizing them. Fourth, mappers note any events that occur that may have a positive impact on the observed person with dementia. These are referred to as personal enhancers. For example, a staff member may show particular skill or sensitivity in dealing with difficult situations such as an episode of incontinence. Another

resident in the facility might put an arm around a person with dementia who is crying, to comfort him or her.<sup>1</sup>

The BDG is committed to ensuring the most ethical and effective use of DCM as possible and maintains tight controls on the use of DCM. To become a mapper, one must undergo extensive training in the method at the basic and advanced levels. Strict operational rules to guide DCM coding are used to help mappers make decisions about which BCCs and WIBs to record. To use DCM in research, mappers must also apply for permission from the BDG to become an evaluator and submit a written report providing evidence of their ability to effectively use DCM data.

Although DCM had been formally imported to 8 countries, including the United States, by 2006,<sup>2</sup> there has not been consistent use of DCM in practice. Anecdotal evidence suggests great variation among these nations in the number of individuals trained at each level (basic and advanced) and in the use of DCM within long-term care facilities. Previous survey research by the principal author of this study found that of those individuals trained in DCM in the United States, the majority of respondents indicated that they were not actively using DCM in their facilities. Effective dissemination of DCM, therefore, depends not only on a formal importation of DCM but on understanding the facilitators and barriers to DCM use in practice. As several other countries are in the process of developing “strategic leads” and a cadre of DCM trainers so that DCM can be formally imported to their nations,<sup>2</sup> this information could be beneficial to a number of countries considering using DCM.

The primary focus of this research was to understand what could be learned from the dissemination and clinical use of DCM in the United Kingdom over the past 15 years to better understand its potential use and development in the United States. Specifically, the research question addressed was what facilitators and barriers affected the use of DCM in the United Kingdom and how relevant are those facilitators and barriers to the dissemination of DCM in the United States?

## METHOD

To address this research question, in-depth, semistructured interviews were conducted with 6 leaders in the UK DCM community in the autumn of 2003. These leaders included current and former DCM trainers sanctioned by the BDG. The respondents were purposively selected on the basis of their noteworthy impact on the development of DCM in the United Kingdom. The selection criteria included having been a DCM trainer currently or previously

employed by BDG and being trained to teach at both the basic and advanced levels. The interviews included a series of open-ended questions including inquiries regarding (1) the respondents' individual experiences with DCM; (2) their beliefs about facilitators necessary for DCM's success; (3) their beliefs about barriers to implementing DCM; (4) their thoughts about how DCM is being informally modified in practice and how it should be formally modified to improve its use; and (5) their thoughts about social policies, values, and cultural issues that affect the dissemination of DCM worldwide.

Audio-taped interviews, approximately 1 hour in duration, were transcribed verbatim and data were entered into Atlas-ti (<http://www.atlasti.com/>) for qualitative data analysis. Using a grounded theory approach, analysis was conducted in a process described by Mason,<sup>5</sup> which begins with the development of an "intellectual puzzle." Analysis was conducted in an iterative manner by 2 independent coders who reviewed the documents and a third who facilitated the process and assisted in code development. All 3 met weekly over a 2-month period to discuss the coding process, come to consensus regarding definitions and appropriate use of codes, and discuss themes emerging from the data. Analysis resulted in 124 codes describing the content of the comments made by the interviewees. These codes were then collapsed into 63 separate conceptual codes categorized under 6 separate themes. Coding concordance rates between the 2 coders was assessed and, when it became apparent that there was a slight variation in the use of some of the codes, the codes were further defined and criteria for their use were made more explicit. Interrater agreement was assessed using Cohen's  $\kappa$ . One-hundred ninety-two coding instances of the 10 most frequently used conceptual codes were compared for agreement. The resulting  $\kappa$  value was 0.79 and concordance rates ranged from 74% to 90%.

## RESULTS

The 6 themes developed by the coders were (1) the development of DCM, (2) the training experiences of individuals in the DCM process, (3) key DCM mapper characteristics, (4) key environmental characteristics, (5) the DCM experience and impact, and (6) potential international development of DCM. Key conceptual codes were identified for each of these themes. Some of these conceptual codes were critical facilitators and/or barriers to the dissemination and use of DCM in the United Kingdom. In the following section as themes are discussed, the corresponding conceptual codes are parenthetically provided.

## Development of DCM

The interviewees reported facilitators who included strong leadership of DCM, the importance of shared ownership of DCM, and the flexibility of DCM because of the evolution of the tool.

"I just remember being totally, totally inspired by Tom Kitwood..." (strong leadership of DCM).

"People who are trained in DCM, who are trainers or are strategic leads have a sense of being part of that development..." (importance of shared ownership of DCM).

"One of the things that attracts me to DCM is that it is a tool under development, that there has always been this dialogue between research and practice" (flexibility of DCM due to the evolution of tool).

In the area of barriers reported in the development of DCM, interviewees spoke of the significant impact of the loss of leadership in DCM, the rigidity of the DCM and BDG structure, and the lack of consistency of DCM due to evolution of the tool.

"Tom knew everybody he trained ... so the need to have formal structure was only really coming in around ... 1997 and Tom died in 1998..." (significant impact of the loss of leadership in DCM).

"A number of us ... became rather estranged from BDG ... we had no formal structure..." (rigidity of the DCM and BDG structure).

"New rules are crafted ... and its very difficult for people to grasp them ... I would bet money that a week after the course, people don't remember them" (lack of consistency of DCM due to the evolution of tool).

## Training experiences

Interviewees described facilitators including the person-centered nature of DCM, the notion that DCM "just makes sense," and that DCM training is transformative.

"I think what DCM does is to put the person with dementia at the center of the picture" (person-centered nature of DCM).

"It just made sense that that was how it should be" (notion that DCM "just makes sense").

"I knew right from the beginning that we could use it, that it would be useful" (notion that DCM "just makes sense").

"I think it was quite a revelation" (DCM training is transformative).

Barriers for this theme included the belief by some that parts of DCM were not person-centered, difficulty in mastering DCM, and some concerns and doubts about DCM itself.

“The type of assessment, such as the examination protocols ... seemed almost contrary to the notion of it being person-centered” (parts of DCM were not person-centered).

“I’ve come across serious misunderstandings about how to, um, analyze the data” (difficulty in mastering DCM).

“DCM doesn’t always work everywhere... it doesn’t work for everybody” (concerns and doubts about DCM itself).

### Key mapper characteristics

Interviewees cited key mapper characteristics as facilitators of DCM including having a good understanding of the person-centered care approach, understanding the importance of a dual perspective that views DCM in terms of both research and clinical practice, and having basic beliefs and skills that make DCM easier to use.

“The staff that they are working with need to have some degree, some understanding of person-centered approach before beginning DCM” (having a good understanding of the person-centered care approach).

“There has always been this dialogue between practice and research and I would expect that to continue” (understanding the importance of a dual perspective that views DCM in terms of both research and clinical practice).

“As long as people are reasonably intelligent and empathetic, I think you can teach anybody to map” (having some basic beliefs and skills that make DCM easier to use).

However, these same key characteristics could serve as barriers if they were not present. Interviewees indicated that DCM would be less effective if mappers did not have a good understanding of the person-centered care approach, lacked a dual perspective in viewing DCM in terms of both research and clinical practice, or lacked some basic beliefs and skills of DCM that make the tool easier to use.

“They have no idea about person-centered care or no means of getting towards that kind of care, it’s not going to happen” (mappers did not have a good understanding of the person-centered care approach).

“Having come from a very strong practitioner background, you have probably gathered that, my missing

link was research” (mappers lacked a dual perspective in viewing DCM in terms of both research and clinical practice).

“I think mappers need personal skills and resources, they need a certain position within the setting so that they are not threatening ... but also they have got enough status ... interpersonal skills on how to give feedback” (mappers lacked some basic beliefs and skills of DCM that make the tool easier to use).

### Key environmental characteristics

Key conceptual codes within the mappers’ environments included concepts that could also be both facilitators and barriers. As facilitators, support from upper-level management for the DCM process, financial support to conduct DCM, support of the staff to embrace the DCM process and its results, and social support from relatives of the people with dementia within the long-term care environment were helpful environmental characteristics.

“In an individual’s organization there needs to be support right from the top to give time and energy to the process, and resources” (support from upper-level management for the DCM process).

“The thing in organizations is that you need to have some funding” (financial support to conduct DCM).

“They need a commitment from the staff to take it forward” (support of the staff to embrace the DCM process and its results).

“I find relatives on the whole have been brilliant” (social support from relatives of the people with dementia within the long-term care environment).

For each of the positive facilitators listed among the key environmental characteristics, there was a corresponding barrier.

“They were not supported; their manager was not particularly good” (lack of support from upper-level management for the DCM process).

“I think one of the difficulties is money” (lack of financial support to conduct DCM).

“Where I worked, they were quite anti-DCM” (lack of support of the staff to embrace the DCM process and its results).

### DCM experience and impact

Facilitators related to the DCM experience and impact included the importance of momentum in the use of DCM,

the strongly held belief that DCM improves the quality of care in a long-term care organization, and the value of a supportive framework around the DCM process.

“The more people that are trained, the more people that are getting the message across that DCM is a good thing to do, so it’s mushrooming already” (importance of momentum in the use of DCM).

“To me, DCM is all about improving the life of person that you are mapping” (strongly held belief that DCM improves quality of care in a long-term care organization).

“We need to have an open culture first, one that looks at development ... open enough to allow person-centered development to happen” (value of a supportive framework around the DCM process).

The barriers identified with this theme included disillusionment with the process when negative DCM results were shared, a concern over the ongoing high resource demands of DCM, concern about the complexity of the implementation of DCM and how this relates to formal and informal use of the tool, and the potential for ethical abuse of this powerful tool.

“I was really, really upset because I thought we were giving very good care” (disillusionment with the process when negative DCM results were shared).

“I think one of the issues that does concern me is that it is an expensive process” (concern over the ongoing high resource demands of DCM).

“I think the problem is that it is a very complex tool, it takes a long time to do data analyses” (concern about the complexity of the implementation of DCM and how this relates to formal and informal use of the tool).

“I don’t want it being used just as ‘well we’ve done this, we’ve met our requirements’ or ‘our company is fantastic’” (potential for ethical abuse of this powerful tool).

### Potential international development of DCM

The final theme, potential international development of DCM, included facilitators identified as DCM’s cultural applicability to individuals from multicultural backgrounds, the importance of specific governmental policies supporting dementia care, and the importance of broad social policies supporting dementia care and DCM as in the United Kingdom.

“It is being modified culturally, which I think is a good thing” (cultural applicability to individuals from multicultural backgrounds).

“That’s happened down in London already...where social service inspectors have used evidence from mapping to get an overall temperature, if you like, of person-centered care” (importance of specific governmental policies supporting dementia care).

“There is a national agenda going on that we are influencing” (importance of broad social policies supporting dementia care and DCM).

Noted barriers to the development of DCM in other nations that were noted by interviews were the selective nature of international demand for and access to DCM, questions concerning the cultural applicability of DCM in other nations, and the significant geographic challenges to be overcome in the dissemination of DCM to other large nations, including the United States.

“There is a danger that DCM becomes an elitist thing, because of whether you can afford it” (selective nature of international demand for and access to DCM).

“There’s the whole process around DCM...issues around preparation, cognitive mapping, feedback and I think there are differences in how culturally appropriate that process is” (questions concerning cultural applicability of DCM in other nations).

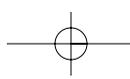
“There are obvious geographical challenges in different countries. The United States is enormous in terms of population and in terms of geography” (significant geographical challenges).

## DISCUSSION

The analysis of the 6 themes, each with their associated facilitators and barriers, led the authors to put forward several key areas of concern that have emerged from this study. Each has important implications for the dissemination and use of DCM in the United States.

Three concerns emanate from the first theme, *the development of DCM*. First, it is clear that strong leadership was critical to the success of DCM in the United Kingdom and the loss of such leadership is detrimental to DCM’s ongoing success. The interviewees in this study supported the idea that Tom Kitwood’s charismatic leadership gave strong direction to DCM and his sudden death in 1998 created a period of uncertainty for DCM in the United Kingdom. The renewal of DCM’s vigor reemerged with the development of fresh leadership in both the BDG director and DCM strategic lead roles.

Organizations are known to work more effectively if there is a lead person or persons providing overall management and direction.<sup>6</sup> Good leadership is important within a healthcare organization, having positive effects on



*The use of DCM may have positive effects on the number of sick days taken and success of recruitment and retention due to higher levels of job satisfaction among staff.*

financial management and well-being of staff that are known to influence the overall quality of care provided.<sup>7</sup>

In the United States, Heather Hill Hospital Health and Care Center served as the strategic lead for DCM between 1998 and 2006, under the direction of Dr Roseann Kasayka. In addition, a national advisory group guided Heather Hill in its dissemination of DCM in the United States since 2004. Unfortunately, the unexpected death of Dr Kasayka in autumn of 2006 coupled with Heather Hill's decision not to renew its strategic lead contract with BDG has left a void in DCM leadership in the United States. Bradford Dementia Group has put out a call to organizations in the United States to apply to be the US strategic lead organization. A selection is expected in 2008. Clearly this leadership selection will prove decisive for the success of DCM in the United States.

The second theme related to the development of DCM is that the evolution of DCM is a double-edged sword as the shared ownership and continual development of the tool makes it difficult and expensive for people to keep up-to-date with changes in DCM. The culture of care has evolved and simultaneously the indicators of the care environment have also evolved. Dementia care mapping manuals are a means to guide people regarding the practice of DCM. Revised manuals formalize some of the informal practices followed by various institutions such as day care centers, residential homes, nursing homes, and hospital wards. Thus, based on feedback and active planning with staff, improvements are constantly being brought about through a process of developmental evolution.<sup>8</sup>

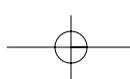
The importance of a shared ownership of the DCM tool on the part of individuals throughout the DCM community cannot be overstated. In the United Kingdom, it greatly served to facilitate the success of DCM. A core group of US advisors has been working together since 2003 to duplicate the collective development of DCM in the United

States but, to date, a critical mass of trainers has not been reached. There are fewer than 10 trainers at both the basic and advanced levels throughout the United States. Without a sufficient number of trainers involved, the emergence of shared ownership in the development of DCM in the United States is impossible.

Third, the availability of up-to-date DCM manuals and training materials and the inclusion of mappers in the developmental evolutionary process is a challenge that has been seriously undertaken by BDG. For example, in the latest revision of the DCM tool, DCM 8, released in 2005, significant input was sought from mappers worldwide and field testing with the revised DCM instrument was undertaken in several countries, including the United States, before the new version of DCM was finalized. Although BDG should be applauded for this substantial undertaking, it raises an important concern about the feasibility of this type of process as the number of mappers worldwide continues to grow. It may become necessary to allow country or even regional variations of DCM to emerge both to facilitate the logistics of shared ownership in the developmental evolution of DCM and to better serve local needs of individuals with dementia in diverse cultures and locations.

Another primary concern emerges that is related to the integration of 2 of the core themes—*training experiences of individuals in DCM* and *key mapper characteristics*. The concern is that while initial training in DCM can be a transformative and rewarding experience, the mappers need specific characteristics to undertake DCM. Without these, they may begin to doubt their ability to be successful with DCM. The initial DCM training is known to be an eye-opening experience. There is great emphasis on the fact that DCM training is known to have a positive influence on practice of dementia care.<sup>6</sup> According to Brooker and associates,<sup>9</sup> data collection and analysis processes can be transforming for those who learn to use DCM. Dementia care mapping is perceived by mappers to improve the quality of care and quality of life for people with dementia. Better quality of care, such as person-centered care, is known to improve the quality of life.<sup>10</sup>

Needless to say, the individuals who engage in DCM training play a vital role in dementia care. Key characteristics among mappers both influence and are influenced by the use of DCM. The use of DCM may have positive effects on the number of sick leave days taken and success of recruitment and retention due to higher levels of job satisfaction among staff.<sup>9</sup> There is a great deal of emotional labor involved in caretaking by the staff, and to continue to practice under this pressure is extremely demanding.<sup>11</sup> If not well supported, the DCM feedback sessions may make



the mappers feel isolated and vulnerable and generate misinterpretations and resentments among coworkers.<sup>11</sup> According to Brooker et al,<sup>9</sup> a small but significant number of staff members can find DCM anxiety provoking.

This highlights the importance of another concern related to *key environmental* characteristics; that is, a lack of managerial, financial, staff or social support in a care environment can limit the impact of DCM. According to Brooker et al,<sup>9</sup> we need to be careful regarding workload and costs when considering implementation of DCM. The economic rewards for dementia care work are low because there are certain perceptions related to this work.<sup>12</sup> Dementia care, itself, is known to be chronically under-resourced.<sup>11</sup> If care workers are not well supported in their environment, the impact of the DCM will be restricted.

Supportive administration and staff are needed in the mapping environment for DCM to be successful. Dementia care mapping can easily be undermined if administrative support is lacking. Staff support for mappers is crucial so that they do not begin to doubt DCM or themselves. It has been found that caregivers of individuals with dementia reported spending more hours caregiving, experiencing more detrimental effects on their employment, experiencing more emotional and physical strain, and having a greater likelihood of suffering mental and physical health problems due to their caregiving role than caregivers of individuals without dementia.<sup>13</sup> Thus without adequate, well-managed, and efficient staff support the DCM's impact becomes limited.

Overall a nonconductive working culture also becomes a limiting factor.<sup>12</sup> Resources such as management support, financial support, staff support, and social support need to be utilized judiciously to attain optimum results.<sup>6</sup> Dementia care mapping must be used in practice in a way that enables staff to understand what is expected of them in their care of individuals with dementia. Dementia care mapping will likely produce anxiety when staff are not made fully aware of the expectations for their behaviors, when staff are not recognized for the positive person-centered care they provide, and when staff are not given appropriate guidance on how to modify their behaviors to better serve the people with dementia in their care. Although the DCM training does highlight the importance of constructive feedback to staff on the last day of training, ongoing support in this area may be needed to ensure that feedback is given appropriately and constructively.

Regardless of the country of practice, DCM mappers must be well supported in their environments by a strong culture of person-centered care, by management, staff, and social support and, not insignificantly, by the financial

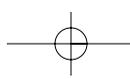
means to consult and utilize the results of the resource-intensive DCM process. Whether or not these supports are available and can be maintained over time in the United States is an unanswered question.

Another area of concern related to both the development of DCM and the potential international development of DCM pertains to the DCM and BDG structure. The DCM structure imparted by BDG in the training process provides rigor and standardization but can create obstacles to DCM use that need to be addressed in the dissemination of DCM to the United States. For example, while the operational rules for applying BCCs and WIB values in DCM increase the reliability of the tool, they are sometime difficult for mappers to remember and use appropriately. The training can inspire individuals to improve their dementia care through DCM but may not sufficiently prepare individuals to actually carry out improved care.

The DCM experience and impact raises yet another concern for successful dissemination of DCM in the United States. Dementia care mapping is a powerful tool that can be used effectively to improve care or can potentially be used unethically with serious negative consequences. The current *aims* of BDG with respect to DCM are the ethical framework of person-centered care; transferring DCM which is a complex method and process including its teaching, implementation, and research; continuing to refine DCM as a tool under progress; and to aid in the dissemination of DCM training and evaluation to better reach people who would benefit from it.<sup>6</sup>

According to Brooker,<sup>6</sup> DCM can provide a shared language across professional disciplines, care staff, and management teams thereby increasing its applicability in care settings. Quality improvements are possible because of the shared language and shared value system between managers and staff.<sup>9</sup> Dementia care mapping can improve care, when used effectively. According to Brooker et al,<sup>9</sup> DCM is a powerful tool that can bring about powerful change within service delivery systems for people with dementia.

Without proper safeguards in place, the use of DCM could have negative effects on care staff and, ultimately, on the care provided to people with dementia. It is absolutely essential that the use of DCM be monitored and supported so that DCM mappers follow practices that will prevent the unethical use of the tool. For example, DCM is not intended to be used to assess the job performance of individual staff members or to compare institutions with respect to quality of care. These uses are considered unethical under the BDG framework.<sup>6</sup> The infrastructure for such safeguarding against unethical or improper usage in the United States has yet to be developed.



*DCM has proven itself to be a powerful tool for the improvement of both the quality of care and quality of life for people with dementia in the UK. While the importation of DCM to the US has begun, the process has several challenges it must face to gain success in the US.*

Finally, emerging concerns related to the potential international development of DCM are 3-fold. Dementia care mapping must be imported vigilantly to address issues of (1) cultural applicability, (2) geographical challenges, and (3) integration with social and governmental policies.

First, cultural applicability is a source of concern for the international spread of DCM. Cultural relativists claim that culture plays a strong role in generating unique forms of healthcare experiences for individuals with cognitive impairment in different settings.<sup>14</sup> Although the United States shares a common language with the United Kingdom, many cultural differences exist. Cultural diversity is present in both countries but differs in terms of both the variety of ethnic cultures residing in each country, and the languages spoken by these groups, and in the historical patterns that created these culturally diverse populations. For example, in the United States, Spanish is the first language for more than 28 million Americans.<sup>15</sup> America's history of slavery impacts race relations and cultural experiences. Furthermore, Americans as a whole have a culture unique and distinct from the predominant British culture. Although challenges to bringing DCM to other countries such as Japan or Germany may provide even greater obstacles (eg, the predominant language is not English), the challenge of importing DCM to the United States has strong cultural components of its own.

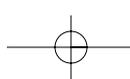
Second, geographic issues present their own unique set of challenges. The United States covers 3,537,438 square miles and has a population of approximately 300 million people.<sup>16</sup> Compared to the United Kingdom with 93,278 square miles<sup>17</sup> and a population of approximately 60 million people,<sup>18</sup> it is easy to see why the dissemination of DCM in the United States becomes more problematic. The logistics

of coordinating DCM mappers, trainers, and advisors can be challenging. The only other country in which DCM is being implemented that has a comparable geographic area is Australia, which covers 2,941,299 square miles.<sup>19</sup> Yet, there the population is approximately 21 million people,<sup>20</sup> enabling the development of a smaller network of DCM mappers, trainers, and advisors. The distinct geographic challenges presented by the United States may well require the establishment of multiple DCM strategic leads or regional strategic leads to overcome the sheer size of both the US land mass and population.

Third, the integration of social and governmental policies has facilitated the dissemination of DCM in the United Kingdom and would need to be in place to better facilitate its dissemination in the United States. For example, in 2001, the Department of Health in the United Kingdom put forth the National Service Framework for Older People.<sup>21</sup> The Framework mandates that 8 standards of care be upheld by organizations serving the elderly. The second standard is directly related to person-centered care. It reads, "NHS and social care services treat older people as individuals and enable them to make choices about their own care. This is achieved through the single assessment process, integrated commissioning arrangements, and integrated provision of services, including community equipment and continence services."<sup>21(p8)</sup> This national policy has dovetailed nicely with the development of DCM in the United Kingdom. Organizations have found the use of DCM to be a convenient and effective way to demonstrate that this standard is being met within their organizations.

Furthermore, the development of the Commission for Social Care Improvement (CSCI) in April 2004 created a single independent inspectorate in United Kingdom responsible for audits and reviews of all social care services, including those serving the elderly and people with dementia. The CSCI has mandated that organizations focus on outcomes of care and that individuals receiving care must have a voice in the audit process. For those people who live in long-term care homes and find it difficult to communicate with inspectors, the CSCI inspectors have begun using an observational tool called the Short Observation Framework for Inspections.<sup>22</sup> This tool was developed by the BDG and based on the principles of person-centered care embedded in DCM. For example, it measures well-being, levels of engagement or behavior, and positive and negative interactions with staff.<sup>23</sup>

Policies such as the National Services Framework for Older People and the use of the Short Observation Framework for Inspections by the CSCI have helped promote person-centered care in general and the use of DCM in



particular in the United Kingdom. Such policies do not currently exist in the United States. Policy makers can help highlight the care of people with dementia and channel resources into this effort so as to lessen the possible obstacles to DCM use in practice in the United States.

## CONCLUSION

Dementia care mapping has proven itself to be a powerful tool for the improvement of both the quality of care and quality of life for people with dementia in the United Kingdom.<sup>24</sup> Although the importation of DCM to the United States has begun, the process has several challenges it must face to gain success in the United States. This article has outlined the historical use of DCM in the United Kingdom with an eye toward identifying the implications from this use for the use of DCM in the United States.

Six themes emerged in this study: (1) the development of DCM, (2) the training experiences of individuals in DCM, (3) key DCM mapper characteristics, (4) key environmental characteristics, (5) the DCM experience and impact, and (6) potential international development of DCM.

From these themes, several implications can be drawn. Strong leadership, shared ownership, and the continual updating of mappers with new aspects of the DCM tool will be critical to the success of DCM in the United States. Although the training can be a transformative experience, mappers must be educated regarding expectations and must have key characteristics to be successful in their use of DCM. Managerial, financial, staff, and social support within mapping environments will be key to the achievement of positive DCM outcomes. Safeguards for the ethical use of DCM must be in place with adequate monitoring to be sure the DCM is not improperly used in the United States. Finally, issues such as cultural applicability, geographical challenges, and governmental policy to support social policy will pose unique challenges for the implementation of DCM in the United States.

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