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# Maryland Nursing Home Consumer Satisfaction

# **Recommendations Report – Final**

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Prepared for Jean Moody-Williams Maryland Health Care Commission 4160 Patterson Avenue Baltimore, MD 21215

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## 1.0 Purpose and Overview

### 1.1 Purpose

This report provides an overview of key information on nursing home satisfaction surveys and recommendations that can assist Maryland with implementing state legislation requiring public reporting of nursing home quality of care and resident satisfaction. The report focuses on the availability of nursing home consumer satisfaction surveys; future reports will address survey methodology and implementation issues.

Under the provisions of Health General Article §19-135(d), the Commission, in consultation with the Department of Health and Mental Hygiene and the Department of Aging, must develop and implement a system to comparatively evaluate the quality of care and performance of nursing facilities on an objective basis and annually publish the summary findings of the evaluation. Nursing home facility means a facility as defined in §19-401 of the Health General Article. The purpose of the comparative evaluation system is to improve the quality of care provided by nursing facilities by establishing a common set of performance measures and disseminating the findings of the comparative evaluation to nursing facilities, consumers, and other interested parties.

The enabling legislation also requires that, as appropriate, performance information be solicited from consumers and their families. The Commission understands this requirement to mean that the Commission should explore the feasibility of collecting patient and family satisfaction information.

Although the ultimate goal remains improvement in the quality of care, the publication and distribution of standardized, comparative information would serve both to assist consumers (e.g., residents and their families/caregivers) in making more educated decisions and for nursing homes to use in quality improvement efforts. These two objectives—improved care and consumer education—can be enhanced by implementing a statewide, standardized satisfaction measurement program.

### 1.2 Brief Presentation of Findings

There are numerous nursing home satisfaction surveys available with several currently in use to support public reporting programs around the country. Many of these tools have undergone extensive development and testing. Our review of the literature, consultation with survey developers, states and others found fifteen nursing home resident and/or family member consumer satisfaction surveys in use in states or among subsets of nursing facilities that can be considered for use by Maryland<sup>1</sup>. We therefore see no need for Maryland to independently develop a nursing home consumer satisfaction survey, and recommend that a single standardized survey instrument that has undergone development and testing be adopted for use and be implemented in every certified home in Maryland. There should be one tool selected for nursing home residents, and a separate tool selected for family members or caregivers of nursing home residents. We also recommend that the survey selected enable the State to tightly control its administration. We believe that an interviewer-administered resident survey allows for the maximum amount of control and therefore encourage the Maryland Health Care Commission to consider selecting such a survey. A self-administered survey for families should meet Maryland's basic needs for family and/or caregiver satisfaction measures. A detailed discussion of the criteria used to review survey instruments and to make preliminary recommendations may be found in Section 4.0.

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We also reviewed a resident survey that has undergone extensive development and looks promising but is not in use in any states or facilities as yet – the federally-sponsored Nursing Home Consumer Assessment of Health Plans Survey.

There are several interviewer-administered <u>resident</u> satisfaction survey tools that meet our basic review criteria. They were created by the following survey developers: NRC Picker, Rutgers University, and Vital Research.

The <u>family</u> satisfaction survey tools that meet our basic review criteria were developed by: Great Lakes, MyInnerview, NRC Picker, Press-Ganey, Rutgers University and Vital Research.

In general, the resident and family survey tools are similar in terms of core content areas, length of time to administer, and in response options used to rate satisfaction.

The final selection of a nursing home consumer satisfaction survey tool will depend not only upon the characteristics of the tool – as described in this report – but on the relationship of the survey tool to Maryland's unique needs and to the public reporting program. Issues surrounding survey methodology, implementation, costs and the use of satisfaction data for public reporting will be further explored in later reports and discussions with Maryland.

### 1.3 Overview of the Report

This report contains a review of the literature on nursing home consumer satisfaction survey tools and methodologies, along with criteria for selection of a tool specific to the State of Maryland's unique needs and goals. We do not attempt here to tell the MHCC which survey instrument to adopt for use; rather, we hope to furnish sufficient information about the tools and the criteria that we believe are important to consider in selection of a tool to allow Maryland to move forward with selecting and implementing the legislative mandate. This report focuses on the availability of nursing home consumer satisfaction surveys; future reports will address survey methodology and implementation issues. With this background information on the variety of tools that could serve the Commission's purposes for data collection and public reporting of satisfaction information, we expect that further detailed information about one or more tools under consideration will be required, which we can assist the Commission and Nursing Home Report Card Steering Committee to collect and review.

This report is divided into several sections:

- **Section 2** provides background on the development and use of nursing home consumer satisfaction survey instruments.
- Section 3 describes the methods used to identify survey instruments in use in states, facilities and elsewhere. This section also describes results of a survey of Maryland nursing homes and their use of consumer satisfaction surveys.
- **Section 4** provides a review of all existing resident and family surveys identified and a discussion regarding which existing survey tools appear to meet Maryland's goals and needs for a satisfaction measure.
- **Section 5** contains a summary of our findings and their implications for Maryland's selection of a consumer satisfaction survey.
- Section 6 outlines recommendations and next steps in this process of selecting a survey tool and survey methodology for measuring nursing home consumer satisfaction in the State of Maryland.

Appendices contain more in-depth information and copies of many of the available survey tools that can be shared with the MHCC at this time<sup>2</sup>.

## 2.0 Background

### 2.1 Satisfaction as a Dimension of Quality of Care

Quality of care is multidimensional. Access to care, quality of life, clinical health status (e.g., functional status, mortality) and satisfaction are all measures of quality of care. Satisfaction is a subjective measure of quality of care, and is often criticized by health care providers because of this and for a lack, at times, of correlation with clinical outcomes. For example, a patient hospitalized for surgery may receive excellent technical care with a good outcome (e.g., surgery is a success) but may be very dissatisfied with the interpersonal care received from the health care provider and with the food and room. Satisfaction with care, however, is increasingly recognized as an important dimension of quality of care. In the nursing home, where many of the residents who may suffer from multiple clinical conditions live permanently, satisfaction with the environment, food and delivery of care may be as important if not more important than their clinical outcomes (Cohen-Mansfield, 2000). A facility that scores well on a clinical measure of quality such as mortality or pressure ulcers might not have the most comfortable and satisfied residents (Cohen-Mansfield, 2000). Satisfaction surveys—measuring *quality of life*—can serve as a crucial and valuable complement to the more objective measures of *quality of care* such as pressure ulcers (Crecelius, 2003).

### 2.2 Use of Nursing Home Consumer Satisfaction Data

The collection of nursing home satisfaction data has increased over the past decade. Information from nursing home satisfaction surveys and measures can be used for multiple purposes including those listed below.

- To help consumers select a nursing home for themselves or their relatives.
- To provide feedback to facilities in order to improve the quality of care for residents.
- To provide comparative measures of performance, within a facility or across facilities.
- To create greater accountability through public reporting of satisfaction results that can influence facilities to improve their quality of care and services for residents.
- To enhance a nursing home's image and to recruit residents through marketing.
- To serve as a measure to adjust reimbursement rates (e.g., provide care-related payment incentives).

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Note: many are proprietary tools, so we have entered into non-disclosure agreements with the developers that allow the team to share these tools with the MHCC. These agreements do not allow the use of the tools, however. Were the MHCC to select a proprietary tool for use in Maryland, licensing and other agreements would likely have to be entered into with the survey developer.

- To assist insurers with contracting.
- To monitor the ongoing quality of care being delivered in a facility by families, residents and regulators.

As one might expect, the type of survey, the design of questions, the choice of respondents and how the data are analyzed and presented may vary with the primary purpose for collecting satisfaction information. Marketers, quality improvement teams, regulators, payors and consumers all have different priorities and seek different sorts of information. For example, marketers might be more interested in questions and scales highlighting a nursing home's strengths and minimizing its weaknesses in order to attract new residents, whereas a quality improvement team would value questions designed to identify problem areas in need of improvement. A single survey instrument might be called upon to fulfill multiple purposes. The primary purpose of public reporting usually is to assist consumers to select nursing homes and to assist nursing homes to identify areas needing improvement. However, once the information is reported, it may be used for any purpose (New England States Consortium, 2001; Cohen-Mansfield, 2000; Castle et al., in press; Lowe et al., 2003; Peak and Sinclair, 2002; Wunderlich and Kohler, 2001; Tellis-Nayak, 2001).

#### 2.3 Current Initiatives in Satisfaction Data Collection

There are initiatives currently underway in states, long-term care (LTC) trade groups and elsewhere to gather nursing home consumer satisfaction data and in some states, to publicly report those data. What follows is a brief description of the various initiatives.

Federal Initiative. The Agency for Healthcare Research and Quality (AHRQ), jointly with the Centers for Medicare & Medicaid Services (CMS), has been funding the development of a nursing home consumer satisfaction survey. This survey builds on the work of the Consumer Assessment of Health Plans Survey (CAHPS), and has been in development since 1999. The consortium of researchers responsible for the survey's development and testing includes Harvard University, RAND and RTI. This group was granted a contract modification in September 2003 to 1) field test the instrument, 2) investigate the feasibility of integrating the implementation of the survey into existing long-term care survey processes or other processes, and 3) begin the development of a family member survey by conducting a literature review of existing surveys (CMS 2003).

*State Initiatives*. Eight states have data collection initiatives underway, including Iowa, Massachusetts, Maine, New Jersey, Ohio, Rhode Island<sup>3</sup>, Texas and Vermont. Three (Ohio, Rhode Island, Vermont) have legislative mandates to publicly report satisfaction, as does Maryland. There are several states that also have legislative mandates to collect and publicly report nursing home consumer satisfaction information but that have not yet implemented data collection programs (Colorado, Florida, Minnesota).

Industry-sponsored Initiatives. The States of Michigan and West Virginia have consumer satisfaction data collection efforts underway. These efforts are industry-sponsored and voluntary on the part of facilities. Michigan's consortium of sponsors includes the for-profit and not-for-profit associations and one other association, and satisfaction data are reported on an industry website. In West Virginia, a group of member facilities of the for-profit trade association participate in satisfaction data collection. Data are collected regarding resident satisfaction and employee satisfaction using separate instruments. These data are publicly reported in a consumer resource guide.

<sup>&</sup>lt;sup>3</sup> Rhode Island is in the process of awarding a contract to implement a resident survey; no data collection is underway as yet.

*Other Initiatives*. Canada has a consumer satisfaction data collection initiative underway to gather data in hospitals and nursing facilities. This information is publicly reported. The NRC Picker Canada group is contracted to train facility volunteers to conduct the interviewer administered resident surveys, and to mail out surveys to family members.

In addition to NRC Picker, there are a variety of satisfaction survey developers that work with these states and trade associations, namely Kleinsorge and Koenig, Life Services Network, MyInnerview, Press Ganey, Rutgers University and Vital Research. We refer to these entities throughout the remainder of this report.

### 3.0 Methods

In order to develop recommendations for Maryland about potential nursing home satisfaction measures that can be used in a state-wide public reporting program, we reviewed the medical literature, government and other reports, visited web sites, and contacted states that have undertaken public reporting of nursing home satisfaction and vendors who have nursing home satisfaction instruments. We also surveyed Maryland nursing homes about their current practices related to nursing home satisfaction measurement.

### 3.1 Identifying Survey Instruments for MHCC

#### 3.1.1 Literature Review

The purpose of the literature review was to identify any published work regarding nursing home consumer satisfaction surveys. Information gathered from this literature review contributed to a working list of 1) states that currently use some type of satisfaction survey, 2) potential contacts within these states, and 3) a general idea of how the surveys are constructed in each state. We began the literature review by updating information already gathered as part of Quality Partners of Rhode Island's "environmental scan" performed for the State of Rhode Island (see <a href="http://www.health.ri.gov/chic/performance/quality/quality16.pdf">http://www.health.ri.gov/chic/performance/quality/quality16.pdf</a>). This update was complemented by the examination of several key review articles (Edwards, et. al 2000; Lowe, et al., 2003; and Vivian Tellis-Nyack, 2001).

Search words used for the Medline literature review included the following: nursing home, long-term care, satisfaction, survey, instrument, tool, resident, residential, family, staff, public reporting, quality of life, quality of care, measurement, measuring, cognitive impairment, and cognitive screen. We also reviewed the bibliographies from key review articles, original articles and book chapters on nursing home satisfaction. In some cases, we requested additional information from the authors and survey developers. In addition, we conducted a web search using key terms including: satisfaction, surveys, consumer, resident, family, nursing home, assessment, and performance. We also visited

- Association websites including the:
  - American Health Care Association (AHCA),
  - American Association of Homes and Services for the Aged (AAHSA), and
  - Association of Health Facility Survey Agencies (AHFSA)
- The National Long Term Care Ombudsman Resource Center website
- The Centers for Medicare and Medicaid Services' website

States identified in the State of Rhode Island Report and the Lowe article, entitled "Consumer Satisfaction in Long-Term Care: State Initiatives in Nursing Homes and Assisted Living Facilities" as having a nursing home consumer satisfaction survey were used as a starting point for our Internet search. We then searched the World Wide Web to explore each of the sample states' current consumer satisfaction survey processes.

#### 3.1.2 Discussion with Survey Developers and with States

After our Internet search, we finalized the list of states potentially involved in nursing home satisfaction measurement to a total of 19 and created a standardized table of information for each of the following: Alabama, Arizona, California, Florida, Indiana, Iowa, Maine, Massachusetts, Michigan, Minnesota, Montana, New Jersey, Ohio, Oregon, Texas, Vermont, West Virginia, Washington, and Wisconsin (see Appendix A). Using information from the state-specific web sites, we used the tables to record information such as the specific population tested with the tool, the sample, number of survey items, and psychometric evaluation. Key contacts were usually found through the Internet (Ombudsman, State or Association websites) or through past research projects. This knowledge gave our team a suitable foundation with which to initiate individual interviews with the states.

After review of the data on these 19 states, a subset were dropped from further consideration and from interview. Arizona, for example, gathers nursing home resident satisfaction information exclusively for members of health plans residing in a nursing facility. This state was dropped from further consideration because the population (elderly and non-elderly in managed care) of interest surveyed does not address Maryland's needs. Other states were contacted, only to find that information from the web or published literature was erroneous and they were <u>not</u> currently involved in measuring nursing home satisfaction. For example, California, Florida and Minnesota are described in the Lowe article as having nursing home consumer satisfaction data collection efforts underway in 2000. However, contacts or other investigation into these states found that in 2004 there are no current efforts underway.

In addition to interviews with state representatives, we discussed various survey instrument properties with developers, such as Stephen Crystal of the Institute for Health, Health Care Policy, and Aging Research at Rutgers University, Neil Gulsvig of MyInnerview, Jesse Samples of the West Virginia Health Care Association, and Dr. Leslie Cortez of the Texas Department of Human Services. All contacts and interview findings may be found in Appendix A.

# 3.1.3 Survey of Maryland Nursing Facilities to Determine the Extent to Which They Measure Satisfaction

In addition to researching the peer-reviewed literature and conducting interviews with developers and others, we worked with the MHCC to investigate the extent to which Maryland facilities collect and utilize nursing home consumer satisfaction data. The primary purpose of this initiative was to further our understanding of current practices in these facilities and to assess the degree of burden that a new data collection effort might impose. To do this, Abt Associates Inc. constructed a survey that adopted questions from both the Quality Partners of Rhode Island's "Nursing Home Resident or Family Satisfaction Tool Questionnaire" (<a href="http://www.health.ri.gov/chic/performance/quality/quality16.pdf">http://www.health.ri.gov/chic/performance/quality/quality16.pdf</a>) as well as RAND's "Assessment of Satisfaction Surveys in New Jersey Nursing Homes and Assisted Living Facilities" (Castle et al., in press). The resulting Maryland survey (see Appendix B) collected information on the types of resident satisfaction questionnaires used, how the questionnaires were created, population(s) of interest, the mode of administration, and the overall purpose of the questionnaires. The survey also requested that a copy of the facility's satisfaction tool be attached for review. The Maryland Health Care Commission distributed the survey to all 243 Maryland nursing facilities in Fall 2003. Surveys received by MHCC were then forwarded to Abt Associates Inc. for

review and analysis. An Excel database was created to enter and analyze submitted information on a question-by-question basis.

By November 2003, the project team received a total of 78 completed surveys; 67 indicated that they collected some type of resident satisfaction information and 11 indicated that they did not. Many of these 67 facilities distribute different surveys to different types of consumers and 30 provided copies of their collection tool(s) including: Current Resident Surveys, Resident Admission Follow-Up Surveys, Discharged Resident Surveys, Rehabilitation Surveys, Long-Term Resident Surveys, Short-Stay Sub Acute Patient Surveys, Health Care Center Resident Surveys, Assisted Living/Personal Care Resident Surveys, Adult Day Care Center Surveys, and Partial Hospitalization Program Surveys. Using information from the Centers for Medicare and Medicaid Services' Nursing Home Compare website and the MHCC's Nursing Home Performance Evaluation Guide, the only significant difference between those facilities that indicated collection of resident satisfaction information and those that did not was that larger facilities (those with certified bed counts of over 100) were more likely to collect this type of resident satisfaction information.

Of the 46 different surveys received, there was an extreme range in the number of survey items (5 items to 123 items). Over half of the surveys (54.4 percent, N=25) used a mixed rating system (combinations of scaling systems, open-ended questions, yes/no, agree/disagree, check appropriate box). The remaining surveys used either a scaling system (30.4 percent, N=14), yes/no (13.0 percent, N=6), or open-ended (2.2 percent, N=1) questions. In addition to the actual survey questions, almost all of the tools included some sort of comment/suggestion space for the person completing the survey.

The surveys targeted both residents and family or designated representatives with approximately 35 percent of the surveys geared strictly towards residents, 24 percent strictly towards family/designated representatives, and 30 percent towards both residents and family/designated representatives (these could be filled out by either or both parties). We also received five surveys (11 percent) where we could not determine the target audience.

Though the majority of facilities used non-standardized tools that were developed internally, some did report the use of tools developed by vendors or survey developers. Five Maryland facilities stated that they use a satisfaction survey created by Press Ganey and one facility uses a modified version of the Press Ganey tool. The Vital Research satisfaction survey is also used by one facility. Although another facility claimed that they use Life Services Network as an outside service to collect resident satisfaction information, the facility did not clarify if they use the survey tool developed by Life Services Network. Briggs, Decision Insights, Holleran Consulting, and Friends Services for the Aging were also mentioned as outside companies that created surveys currently in use in Maryland facilities.

## 4.0 Review of Resident and Family Surveys

Satisfaction surveys, survey development and testing, survey methodology and survey implementation, though all inextricably linked, are also daunting in their complexity and in the volume of issues to comprehend and consider. In order to streamline our literature review and present Maryland with a brief but comprehensive body of information about nursing home consumer satisfaction surveys, we limited this review to those survey characteristics and other vital components that the project team identified as crucial to the State's selection of a survey instrument. To that end, parameters were established to 1) focus on only those surveys capable of meeting Maryland's needs for satisfaction reporting, and 2) describe the surveys according to what we considered their most vital components. Section 4.1 describes the primary criteria we applied to evaluating the utility of a survey for public reporting, and summarizes those criteria in the form of implications for Maryland or

recommendations. Section 4.2 describes survey characteristics that help to distinguish important properties from one survey to the other in order to see which may ultimately meet Maryland's needs.

# 4.1 Primary Implications of Using Consumer Satisfaction Data for Public Reporting

As stated earlier, Maryland has a legislative mandate to provide satisfaction data to consumers. Public reporting of those data is likely to occur via the MHCC's web site that already presents consumers with information about nursing facility characteristics, survey and certification data, and clinical care (e.g., quality indicator data). Consumer satisfaction data gathered in Maryland to meet the legislative mandate will need to be provided to nursing facilities in the aggregate, in a non-identifiable manner.

This mandate has significant implications upon the choice of a resident and/or family consumer satisfaction instrument. Based on prior experience in Maryland and other states involved in nursing home public reporting of quality indicators and other information, the data sources used for aggregation and analysis of quality – or in this case, of satisfaction – must be valid, reliable, and of sufficient volume to produce meaningful results. These requirements translate into the following overarching criteria for use by the MHCC in selecting a nursing home consumer satisfaction instrument. Each are further elaborated on in our discussion of survey use, characteristics and measurement properties.

The tool must be valid for the population of interest. As described in detail in this report, there are a wide variety of survey tools in use in states or in subsets of Maryland nursing facilities today. We generally think about these tools as either relevant for families or for nursing home residents themselves (see Section 4.2.3 for a further discussion of types of nursing home consumers), and we think about aggregating the data separately for each population. However, some survey instruments are utilized for both residents and for family members, without regard to which is which, and the data are aggregated across all surveys to obtain a common measure of satisfaction. We do not support this approach, as the literature does not support that families are good proxies for residents when it comes to their level of satisfaction or quality of life (Berlowitz, et al., 1995; Dorman PJ, et al., 1997; Epstein AM, et al., 1989; Grootendorst PV, et al., 1997; Lavizzo-Mourney RJ, et al., 1992; Rothman ML, et al., 1991). In order to avoid this problem, the MHCC should only consider survey tools that have been found to be valid for the population for which they were designed.

The tool must have undergone a rigorous development and testing process. Again, since the data will be utilized for public reporting, it is vital to select a survey instrument that has been well thought out and tested. The most rigorous tools have utilized focus groups and other forums to obtain consumer input on the core domains of consumer satisfaction, have undergone cognitive testing to determine if items and response categories are comprehensible for elderly nursing home residents, and have undergone validity and reliability testing. These tests generally result in modifications to the original survey instrument so that the final instrument incorporates good experience and is based upon sound metrics. The selection of a well-developed and tested survey tool will enable the Commission to report the satisfaction data with confidence.

The tool must be implemented in every certified nursing home in Maryland. In order for each nursing facility to have consumer satisfaction data displayed on the website, each must have satisfaction data to report. Thus, all certified Maryland facilities must provide data, to the extent that they are of sufficient bed size to do so. Survey developers' experience and recommendations on the minimum number of residents that must be measured per facility

varies and is impacted by survey response options, number of questions, survey administration and other issues; this issue will need to be further explored as Maryland considers the selection of a survey tool and survey methodology.

The satisfaction survey data must be collected under tightly controlled circumstances. In order to utilize the satisfaction data collected for public reporting, Maryland must have assurances that the data represent the voice of 1) the consumer, or 2) the family member or caregiver. As stated earlier, we believe that it is vital to keep these populations distinct, and to report satisfaction for these populations separately. The choice of a survey administration method (e.g., self-administered survey, interviewer-administered survey) will greatly influence the level of control that Maryland has over the data. Self-administered resident surveys are more difficult to control, because family members, caregivers, or even staff members may assist residents to complete them (or complete surveys themselves). In addition, staff are often involved in disseminating self-administered surveys to potential respondents. This means that facilities essentially designate who shall have the opportunity to respond to satisfaction surveys. The risk of this lack of control over survey administration is not only that the data source (i.e., resident) becomes muddled, but that bias is introduced into the satisfaction measure. This bias arises in several ways: 1) responses may reflect staff or family opinions rather than resident opinions; 2) residents who receive assistance from facility staff in completing surveys may fear retribution if they provide negative feedback, so therefore their responses are not a true reflection of their satisfaction; or 3) satisfaction results are obtained only from those residents (or family members) that the facility determines should respond.

# 4.2 Other Important Considerations in the Selection of a Survey Tool

There are several other parameters that the project team, after discussions with developers, states, and with the MHCC, identified as important to the selection of a nursing home satisfaction survey and survey methodology. These represent broad criteria that, if not met, would exclude survey tools from further consideration. For example, based on our discussions with the MHCC, if a consumer satisfaction instrument was not designed to measure long-term nursing home resident satisfaction, there would be no point in reviewing that tool. This population represents a large proportion of nursing home residents and thus, a tool that only measures discharged, short-term residents, for example, would not meet Maryland's needs. The following section describes what can be considered the "secondary" set of parameters (secondary to the public reporting considerations) against which survey tools were reviewed.

#### 4.2.1 In Use in States or Facilities

We only considered survey instruments for further evaluation if they had been used outside a research setting or were actively used in entire states or by a subset of facilities in states. For example, the forprofit long-term care trade associations in certain states (i.e., Vermont, West Virginia) have initiated efforts to collect and report on nursing home consumer satisfaction data; the survey tools used by these groups were evaluated for their potential use by Maryland.

There was one exception made to this criterion. The nursing home CAHPS (NHCAHPS) instrument, under development jointly by AHRQ and CMS, was included for further evaluation by Maryland, though that tool is not in use yet in states or among a sample of facilities. Since the instrument may eventually be mandated for use by nursing facilities nationally, and has had the benefit of substantial federal development dollars, the project team included it in this review.

#### 4.2.2 Use of Same Tool for Data Collection

In order to compare facilities, the same survey instrument with the same question and same response options must be used. Information from different instruments that use slightly different worded questions or different response options make comparing information between facilities nearly impossible. Thus, in order to use consumer satisfaction information for public reporting, all facilities in Maryland must adopt the use of the same standardized satisfaction instrument. Facilities can choose to collect *more* satisfaction data more frequently than specified; however, the addition of questions by facilities to the standardized satisfaction instrument may not be possible since additional questions may change the reliability and validity of the instrument. Nonetheless, all facilities will need to collect a core set of satisfaction items in order for the MHCC to have comparable data for public reporting.

#### 4.2.3 Nursing Home Consumer Satisfaction Survey Population of Interest

There are multiple potential populations to be surveyed in the nursing home including both residents and their family members/caregivers. Among residents, there are at least four distinct populations based on their reason for using nursing home services and their clinical condition:

- Short-term rehabilitation:
- End of life care (e.g., hospice);
- Long-term care (no or mild cognitive impairment); and
- Long-term care (cognitively impaired).

The short-term rehabilitation population often are admitted following a hospitalization and require short-term physical, occupational or speech therapy to regain function lost as a result of their acute illness and hospitalization. Their clinical needs are often very different from clinical needs of longterm residents and their stay on average is one to three weeks in length. Collecting information from this population often requires a unique survey instrument and questions, which are not widely available nor well tested. However, some issues are common to both short-stay and long-term care residents such as environment and food. The tracking of these short-stay residents who are often discharged to many different locations is an added difficulty in administering them a satisfaction survey. In addition, many nursing homes provide care to only a small number of rehabilitation residents (on average only 25 percent of nursing homes provide rehabilitation to at least 20 residents over a six-month period) that would yield an inadequate sample size for public reporting. While the short-stay resident is an important population, we recommend that Maryland not initially target and report information specifically from these discharged residents. However, since some of the questions on satisfaction surveys (e.g., food or room) for long-term residents may also apply to the short-stay population, it may be appropriate to include current residents receiving rehabilitation services in facility-wide resident satisfaction data collection.

While satisfaction with care for residents dying in the nursing home has recently been found to be poor (Teno et al., 2004), the same problems with collecting information from the rehabilitation population exists for this population. Thus, we do not recommend including this population in satisfaction reporting at this time.

Long-term care residents can be divided into those able to respond to satisfaction surveys and those that are unable. Cognitive impairment limits a large proportion of this population from responding to survey questions. However, useful information can be obtained from at least 60 percent of nursing home residents (Schnelle 2003, Kane et al., 2003). Simmons et al. (1997) advocates for the use of objective standards for screening and selecting residents for surveying satisfaction. In Ohio,

approximately 40 percent of residents could not participate in an in-person interview about nursing home satisfaction.

Family members and caregivers of nursing home residents often are involved in the selection of nursing homes and may visit the resident frequently. For residents with cognitive impairment, the family member/caregiver are the only source of information about the resident's care. Collecting data from families/caregivers provides additional and important information that can both help potential consumers select a nursing home as well as nursing homes monitor their quality of care. Therefore we recommend collecting information from families/caregivers of all current residents in the facility including both long-stay and short-stay residents.

There is some debate in the literature and in practice about whether family members/caregivers can serve as "proxies" for residents in the assessment of satisfaction. One side of the debate cautions against the use of families as proxies (Berlowitz, et al., 1995; Dorman PJ, et al., 1997; Epstein AM, et al, 1989; Grootendorst PV, et al., 1997; Lavizzo-Mourney RJ, et al., 1992; Rothman ML, et al., 1991), while the other side believes that families can sometimes serve as reasonable proxies to assess the clinical delivery of care for residents and their outcomes (Tellis-Nyak, 2001, Arizona Health Care Cost Containment System). We believe that in the nursing home setting both the resident and the family are important consumers that provide different perspectives on the quality of care. Therefore, we recommend that both resident and families/caregivers be surveyed using separate instruments, with satisfaction results reported separately for each population.

In measuring nursing home resident satisfaction, one additional population deserves mentioning: nursing home staff. The concept measured relates to the experience of the staff working in a nursing facility, and whether these employees are satisfied with their working conditions and with the facility. While this does not directly measure either family or resident satisfaction, studies have found correlations between resident and staff satisfaction (Chou et al., 2003, Tellis-Nyak, 2001). That is, facilities with high employee satisfaction also tend to have residents who are more satisfied. We understand that Maryland may not wish to consider collecting staff satisfaction data at this time; however, we do include further information on the topic in Appendix C as reference material.

# 4.2.4 Summary of How Existing Surveys Fare Against Selection Parameters and Implications for Maryland

Table 1 reports on the use of the eleven nursing home resident and family consumer satisfaction instruments identified through our review. One additional category noted in Table 1 and not described above is about state costs. In addition to questions about public reporting, we asked states and/or developers about the cost to the state of developing, testing, administering, analyzing or public reporting the consumer satisfaction data. Findings on this topic are displayed in the last row of the table.

As shown in Table 1, many nursing home consumer satisfaction developers offer both resident and family satisfaction survey tools. The NHCAHPS instrument for assessing resident satisfaction is still under design and therefore does not have an associated family instrument as yet. Our understanding is that the contractor responsible for survey development and testing is charged to develop a family instrument under their modified scope of work (personal communication with AHRQ, 2003). Facilities that are part of Michigan's industry-led initiative to collect nursing home satisfaction data utilize only a family member satisfaction tool.

All of the surveys listed in Table 1 meet the basic criterion of being in current use in some type of statewide consumer satisfaction data collection initiatives or in long-term care trade association-sponsored initiatives (except for NHCAHPS as noted above). The volume of surveys collected and number of nursing facilities participating in data collection efforts varies greatly. It is important to

note, however, that only two of the states currently collecting consumer satisfaction data have a legislative mandate to do so; therefore many of the efforts described here are voluntary on the part of facilities.

Interestingly, the majority of these nursing home consumer satisfaction data gathering efforts are not primarily related to public reporting initiatives, and only one of the states (Texas) currently mandates facility participation in satisfaction survey data collection. Two survey instruments – the NHCAHPS and the Rutgers tool – are still under development and therefore are not yet at the point in which public reporting of results would be feasible. Texas nursing home consumer satisfaction data are reported as aggregated scores for the State, but no individual facility-level data are publicly reported. Other industry-driven efforts, such as that in Iowa, and those facilities that utilize the MyInnerview or Life Services Network tools do not publicly report the data. In these states, data are analyzed by the developer/vendor and then delivered back to facilities in the form of reports, presumably to be used for continuous quality improvement efforts.

#### A Note on the Costs of Satisfaction Surveys

Maryland should certainly consider development and implementation costs in selecting a nursing home satisfaction instrument. Before doing so, however, data that are more detailed than the summary estimates made available to us should be gathered from organizations that have launched satisfaction surveys. Neither our interviews with States nor the literature we reviewed yielded consistent information on how costs vary among instruments or on what important parameters in each specific State application cause costs to vary. As Table 1 shows, where any data were available (and cost estimates for proprietary instruments were seldom available), costs were rarely quoted on the same base (total expenditure, expenditure per bed, expenditure per facility, expenditure per resident). Also, components of cost estimates (planning, testing, implementing, reporting) were not identified in comparable formats. For example, on a total budget basis, it appears that the "development and pilot testing" costs of the Rutgers tool ranged from \$125 thousand in New Jersey to \$200 thousand in Maine. In Michigan, the Consumer Guide for Nursing Homes cost \$300 thousand to "develop and distribute." Without further line-item level details and consistently defined cost components, we were unable to use these or other published estimates to evaluate instruments on relative cost. Cost issues will be further explored in our future report on survey methodology and implementation.

Table 1:

#### **Description of Survey Tool Use**

	Vital Research (Ohio Department of Aging Satisfaction Survey)	Mylnner View Satisfaction Survey	Rutgers Satisfaction Assessment Tool-Nursing Home	Press-Ganey Nursing Home Survey	NH-CAHPS Resident Survey	NRC + Picker	Nursing Facility Performance Monitoring Data Instrument (Texas)?	Michigan Consumer Guide for Nursing Homes +	Kleinsorge & Koenig (lowa)?	West Virginia AHCA Chapter +	Life Services Network
Survey used by states or trade groups	Y (OH)	Y (Industry)	Y (MA, ME, NJ)	Y (VT)	N	Y (Canada)	Y (TX)	Y (MI)	Y (IA)	Y (AHCA member facilities)	Y (Illinois AAHSA affiliate)
Results used for public reporting	Y	N	N	Y	N	Y	NΔ	Y	N	Y	N
Number of facilities currently using tool	20,226 family surveys (662 facilities) returned in 2001	Used in over 800 long-term care facilities in 11 states	Not applicable	33 facilities (VT)	Not applicable	70 hospitals/ facilities across Canada	Used with a random sample of 2,000 out of 8,000 residents	13,500 surveys (315 facilities) returned in 2002	In 2002, 340 facilities participated	2,164 surveys returned from 111 facilities	2,000 surveys returned
State cost when used for public reporting	Shared by facilities (charged \$400/year for service) and State. Estimated per resident cost is \$25.	Not available	Maine reported approximately \$200,000 to develop & test the tool in 40 homes.  New Jersey reported \$125,000 on pilot to develop & test tool.	Vermont reported that each survey costs \$1.68 to mail. Each facility report (two per year) cost approximately \$647/report.	Not applicable	Not available	Included as part of Nursing Facility Performance Monitoring Instrument, approximately \$300,000 overall.	HCAM proposed a \$4/bed dues to cover cost: \$8,000 for website and \$300,000 to develop & distribute surveys.	Not applicable	West Virginia AHCA costs reported at \$18,000.	Not applicable
Resident tool available	Y	Y	Y	Y	Y	Y	Y	N	Y	N	Y
Family tool available	Y	Y	Y	Y	N	Y	N	Y	N	Y	N=

Key [Y=Yes, N=No, NA=Not Applicable].

Notes:

Source: Abt Associates Inc.

<sup>?</sup> Designed for residents, however families are permitted to complete if resident unable

<sup>+</sup> Designed for families, however residents may complete if able.

ΔTexas reports aggregated scores for the state but no facility-specific data.

<sup>=</sup> Family Survey under revision. To be available February 2004.

# 4.3 Characteristics of Nursing Home Consumer Satisfaction Surveys

Based on our review of the literature and reports, and discussions with the MHCC, developers and others, we have reviewed the existing nursing home consumer satisfaction surveys to understand their content, characteristics, and developmental and psychometric features. This section provides a detailed description of key characteristics of nursing home satisfaction instruments that the project team has determined desirable for Maryland, including those listed below. We also provide some discussion of the implications of these characteristics for Maryland.

Key desirable survey characteristics:

- The resident survey is conducted as an interview.
- The survey specifies its cognitive screening tool or component and the cognitive ability required of respondents to complete the items.
- The survey contains a global satisfaction question or questions.
- The survey contains core satisfaction domains or content areas.
- The survey is as brief as possible, both in number of items and length of time to respond.
- The survey format and items are conducive to accurate consumer responses.

#### 4.3.1 Interview-based Nursing Home Resident Surveys

As discussed briefly in Section 4.1, a fundamental decision for measuring nursing home resident satisfaction is the choice of a survey method. Many consequences follow from this initial selection. There exist three basic approaches to administering a resident satisfaction survey: telephone interviews; self-administered questionnaires; and in-person interviews:

- *Telephone interviews*. Given the hearing problems experienced by many long-term care residents, the lack of availability of phones to all residents, and difficulty reaching residents by phone, the resident satisfaction literature does not promote this approach to measuring satisfaction. Whatever convenience might be gained by means of the telephone, the potential for miscommunication is too great.
- **Self-administered auestionnaires.** These surveys can be administered by mail or distributed in the nursing home to be deposited in a box to "guarantee" confidentiality. The central advantage of self-administered questionnaires is the opportunity to solicit responses from a large group of residents that are all capable of completing such a survey. Costs per completed survey are also less for self-administered questionnaires. Disadvantages include low response rates compared to in-person interviews and the difficulty in conducting a cognitive screen to determine which residents should be eligible for the survey. Perhaps most importantly, mail surveys or even the selfadministered questionnaires that are left at a resident's bedside allow no control for who actually fills out the survey or who may assist the resident complete the survey. It is extremely difficult to ensure that neither family members or staff complete or assist the resident complete self-administered surveys. As was explained earlier, proxies such as family members cannot be relied upon to accurately represent a resident's views on satisfaction. Given that one of Maryland's explicit goals is to measure resident satisfaction, the inability to control for who completes the survey raises questions about the validity of results from a self-administered survey. Is it measuring only resident

satisfaction or some mix of resident and family or staff's perception of resident's satisfaction? This could throw the results into question. It is perhaps possible for self-administered questionnaires to be completed at long-term care facilities with proper controls in place to prevent either proxy responses or influence from staff, but we are unaware of an effective approach currently in practice.

• *In-person interviews*. Although longer and more expensive per interview completed, the live, in-person interview provides the most reliable and most useful information about resident satisfaction. This approach also allows for immediate clarifications when necessary. However, without properly trained interviewers, incorrect information may be obtained from the residents. Interviewers also must not be employees (or perceived as employees) of the nursing home, as this can affect residents' responses to questions. For example, residents may not be willing to provide negative feedback if the staff member administering the survey is a nursing home staff member.

The general consensus of the long-term care resident satisfaction literature is that in-person interviews provide the best reflection of resident's satisfaction. Indeed, not only is the interviewer-administered method the "gold standard" for satisfaction measurement (Kane et al, 2003), but it could be argued that it is the basic minimum standard for obtaining and disseminating meaningful results. We therefore urge Maryland to consider this approach and conduct its statewide nursing home resident satisfaction surveys by means of live, in-person interviews. We do understand that this must be balanced against the cost of such an approach. We also believe that a self-administered family member/caregiver satisfaction survey would be the most feasible approach for this population.

#### 4.3.2 Cognitive Screening

A large proportion of nursing home residents suffer from dementia which may limit their ability to respond to satisfaction questions. However, several prominent experts in nursing home measurement, while advocating for cognitive screening tests, believe that too many residents may be excluded. In a recent editorial, John F. Schnelle addressed the topic of "Improving nursing home quality assessment: Capturing the voice of cognitively impaired elders." He describes as "stereotyped" the assumption that useful information cannot be derived from cognitively impaired residents, and argues that cognitive screens should be designed and employed not primarily to exclude individuals, but instead to be as inclusive as possible (Schnelle 2003). Kane and colleagues determined that useful information could be gleaned from at least 60 percent of nursing home residents (Kane 2003). Recognizing cost limitations and potential response biases, Schnelle makes a forceful case for seeking to move beyond current standards to include a greater proportion of long-term care residents in quality measurement (Schnelle, 2003; Kane et al., 2003).

Schnelle urges a standardized interview protocol, and similarly, Simmons et al. (1997) promotes the use of objective standards for screening and selecting residents for surveying satisfaction. They both argue that subjective estimates by nursing home staff of who can and who cannot complete surveys or interviews are often misguided.

A number of cognitive screening tools, some as brief as three questions, have been used and tested for validity. Most of these tools appear to perform fairly well (Borson et al., 2003; Borson et al., 2000; de Yebenes et al., 2003; Fredericksen et al., 1996; Gruber-Badini et al., 2000).

We support these experts' recommendations and echo Schnelle's approach of screening residents to include rather than screening residents to exclude. There should be a commitment to selecting a survey instrument and screening tool that a good majority of residents could complete. While we do not recommend any particular cognitive screening instrument, we do urge that one be adopted, and

the screen should be administered at the time of the survey, in combination with methods of randomization and sampling.

#### 4.3.3 Global Satisfaction Measure

Although there exists no single measure of resident satisfaction, almost all survey instruments include one or more questions concerning overall satisfaction with the nursing home. Typically, such questions ask directly about overall satisfaction or ask whether or not or how strongly the resident would recommend the facility to other individuals. *Given the nearly universal acceptance of such a measure and the lack of any compelling arguments against it, we recommend that the Maryland Health Care Commission include in its nursing home resident satisfaction survey a question or questions focused on overall satisfaction* (Edwards et al., 2000; Ryden et al., 2000; Tellis-Nayak, 2001; Tellis-Nayak, n.d.).

#### 4.3.4 Core Domains of Satisfaction

Nursing home consumer satisfaction cannot be defined as a single objective characteristic. Rather, satisfaction represents a multidimensional collection of issues relating to several different aspects and experiences of the particular group responding (i.e., resident, family or staff) (New England States Consortium, 2001). Residents may be extremely satisfied with one area (e.g., food services) but very dissatisfied with another area (environment). To capture these different areas nursing home consumer satisfaction instruments should include questions that focus on these major areas or "domains". Just as overall satisfaction reflects a composite of a person's satisfaction with multiple domains, within a single domain, there are often multiple issues that are important to measure. For example, satisfaction with food is a composite of how it tastes, its temperature, presentation, and the dining experience. Thus to adequately assess satisfaction with food, satisfaction surveys will need to ask several questions about the food. The responses to these questions are usually added together to determine a "domain score" for that area.

Researchers and instrument designers have used various techniques to involve stakeholders in determining core domains of satisfaction. This helps maximize the relevance of the survey to the participants and ensure results accurately reflect issues important to the consumer (e.g., resident). Surveys that address domains considered "relevant" also increase respondents' willingness to participate, complete interviews or surveys and provide complete and thoughtful answers (New England States Consortium, 2001). Techniques such as content analysis, focus groups, expert panels and nursing home resident interviews have been utilized in order to designate and validate key nursing home consumer satisfaction domains (RTI, 2003, Ryden et al., 2000, Kane et al., 2003, Bowers et al., 2001, Edwards et al., 2000). After developers have sought input from consumer and experts in creating questions for different core domains, they will evaluate the extent to which all the questions assigned to a domain that make up a composite score reflect the same underlying construct. For example, all questions on food should correlate with the composite food score. Internal consistency of similar domain questions is often assessed by calculating the Cronbach's coefficient alpha (McDowell and Newel, 1996). Cronbach's alpha essentially represents the average of all the correlations between each question and the total score of all questions. A Cronbach's alpha of >0.8 is considered to be excellent, >0.7 as good and <0.4 to be poor (McDowell and Newel, 1996). This approach also allows developers to shorten the number of questions when some are so highly correlated that asking only one of the two questions will be sufficient.

Interestingly, the key domains of consumer satisfaction important to nursing home residents may be different from those reported by family members, though few studies have adequately developed and then validated which domains of satisfaction are particularly important to nursing home residents compared to family members. Mostyn et al. (2000) reported on the development of a family

satisfaction tool (later acquired by Press Ganey) that utilized a review of existing questionnaires and literature and interviews with administrators to generate a pool of potential questions. The final set of instrument questions was determined by a review of facility staff, residents and family members, and later tested in a national study with over 9,000 completed surveys. These measures of family satisfaction are in direct contrast to the process that some instruments employ, allowing family members to act as proxies for residents responding as they feel the resident would respond (see Section 4.2.3 for a discussion on the use of proxies).

Based on our review of the published literature, and examination of the currently available instruments in use and their processes for development, we identified the following set of eight core domain areas as key to resident and family satisfaction (Crystal et al., 2003, Edwards et al., 2000, Kane et al., 2003, Mostyn et al., 2000, RTI et al., 2003, Ryden et al., 2000, Tellis-Nyak, 2001). We also identified some additional domains that are frequently mentioned by experts and included in some surveys but did not feel were as important to include in a standardized tool for use in Maryland; we refer to these as "non-core" domains.

#### **Core Domains**

- **Overall Assessment:** This domain represents the resident or family member's general level of overall satisfaction with care and services provided by the facility.
- **Activities:** This domain addresses questions about type of activities and their participation in those activities.
- Environment (e.g., Facility Appearance, Room, Maintenance, Housekeeping, etc.): Questions typically address resident's physical environment, surroundings, room, nursing units, odor, noise, and home-like environment.
- Food (e.g., Meals, Dining, Food): Questions usually address menu selection, taste and temperature of food and the eating experience including the dining room area.
- **Autonomy/Privacy:** This domain typically covers issues surrounding courteous and respectful treatment, respect for dignity, level of control, involvement in decision-making and maintenance of independence as much as health allows.
- Clinical Care and Treatment (Physician and Nursing Care): Given the health problems faced by most long-term care residents, the residents' evaluation of medical care and treatment figures prominently as an element of satisfaction. This domain covers issues associated with medical services, nursing services, delivery systems, and staff skills.
- Personal Care (e.g., Direct care, Nurse Assistants, Personal Care, etc.): In addition, to clinical services, many nursing home residents require assistance with personal care (e.g., dressing, bathing, toileting), often provided by certified nursing assistants.
- Staff Interaction Clinical and Non-clinical Staff: Includes questions on the ease and effectiveness of communication with all staff including physicians, nurses, nurse aides and general facility staff and their responsiveness to questions and requests.

#### **Non-Core Domains**

• **Family Involvement:** This domain usually is included in family surveys but not in resident surveys. Questions usually focus on the involvement and communication with the family about the resident.

- Non-clinical Staff Services: Residents and families often require assistance from nonclinical staff (e.g., Admissions coordinator, Finance, Administration, or Social Services).
   Questions in this domain focus on the availability, responsiveness, and effectiveness of these services.
- Laundry: Residents often have their personal clothing laundered by the facility. Satisfaction with this service may include questions about effectiveness, frequency, and lost items.

As noted above, a number of different analytic techniques can be used to identify key domains and the final set of questions that constitute each domain. Given the variety of approaches utilized by developers and the limitations to the information available on these approaches to the project team, we have not attempted to compare the instrument domains on the basis of the development approaches and their results. However, we did attempt to compare if the surveys contained questions related to each of our recommended core domains. It was difficult to make direct comparison between surveys as many of the survey developers utilized different names or titles for their domains. In addition, some surveys explicitly grouped questions by domain (e.g., food), while others listed all questions on the instrument without any grouping. Therefore, in addition to reviewing the stated domains, we also reviewed the questions on each survey instrument to determine if the tool had questions that addressed our recommended set of core domains. Tables 2 and 3 indicate if the resident and family surveys, respectively, contain at least one question related to our recommended core domains (note: the actual domain names used by each survey are contained in Appendix D; copies of each instrument are contained in Appendix E).

This review process revealed that 1) not every survey tool identifies (or reports information in terms of) domains (e.g., the Texas tool), 2) there is great variation in domains addressed (and reported) by developers, and 3) within each domain there is variation in the content of the questions. An example of a domain that is described in a fairly consistent manner across tools is the "environment" domain. Developers label this concept as Atmosphere & Environment (Life Services Network), Environment (Rutgers), Home Issues Scale (K & K), Room (Press Ganey), Living Environment (NCR Picker) and Facility (Michigan). Even for this fairly consistent domain, there are examples of tools that place questions about the environment within other less obvious areas, e.g., questions on the temperature and cleanliness of the nursing home are located within the "Overall rating of the Nursing Home experience" in the NHCAHPS tool. We saw several examples of questions grouped together that appeared to have little consistency, but were likely correlated statistically, e.g., the Rutgers Family Satisfaction Tool "Administration" domain contains questions on consistent assignments of care givers, staff sensitivity to cultural and ethnic differences, adequate staffing and sufficient help to fill out paperwork. Given this variation in domain labels and content, and the limited scope of this project, we relied on the testing conducted by developers as to the grouping of questions. We did review the content of the questions to verify that key domain areas were addressed by the instruments under consideration. We recommend that Maryland select a satisfaction survey that address the majority of the eight concepts, or domains, that we have identified. We would not expect, however, that the public reporting of consumer satisfaction be structured by domain.

Some instruments contain questions of particular importance to their developer (e.g., Texas had evidence that their nursing homes had problems with restraint use and toileting and opted to include specific questions on these areas). Some states have given facilities the option of adding facility-specific questions to a core set of items (e.g., Vermont uses the Press Ganey tool and allows the addition of up to four facility-specific questions to its proprietary tool). As the Commission reviews potential instruments, consideration should be given to any Maryland-specific issues that are not addressed in current survey tools that would require the development of new questions.

Table 2:

Core Domains - Resident Surveys

DOMAINS *	Vital Research (Ohio Department of Aging Resident Satisfaction Survey)	Mylnner View Resident Satisfaction Survey	Rutgers Satisfaction Assessment Tool- Nursing Home Resident (New Jersey, Maine)	Press- Ganey Nursing Home Resident Survey (Vermont)	NH-CAHPS Resident Survey	NRC + Picker Resident Survey (Canada)	Nursing Facility Performance Monitoring Data Instrument (Texas)	Kleinsorge & Koenig (lowa)	Great Lakes/ Michigan Family Satisfaction Survey Instrument	West Virginia AHCA Chapter	Life Services Network
CORE DOMAINS											
Overall Assessment	Υ	Y	Υ	Υ	Υ	Υ	Υ	N			Y
Activities	Y	Y	Y	Y	N	Y	Υ	Y			Y
Facility Environment (e.g., Facility Appearance, Room, Maintenance, Housekeeping, etc.)	Y	Y	Y	Y	Y	Y	N	Y			Y
Food (e.g., Meals, Dining, Food)	Y	Y	Y	Υ	Υ	Υ	Υ	Υ			Υ
Autonomy/Privacy	Y	Y	Y	Y	Y	Y	Y	N			Y
Clinical Care and Treatment (Physician and Nursing Care)	N	Y	Y	Y	Y	Y	Y	Υ			Y
Personal Care (e.g., Direct care, Nurse Assistants, Personal Care, etc.)	Y	Y	Y	Y	Y	Y	Y	Y			Y
Staff Interaction – Clinical and Non-clinical Staff	N	Y	Y	N	Y	Y	Y	Y			Y

Table 2:

#### Core Domains - Resident Surveys

DOMAINS *	Vital Research (Ohio Department of Aging Resident Satisfaction Survey)	Mylnner View Resident Satisfaction Survey	Rutgers Satisfaction Assessment Tool- Nursing Home Resident (New Jersey, Maine)	Press- Ganey Nursing Home Resident Survey (Vermont)	NH-CAHPS Resident Survey	NRC + Picker Resident Survey (Canada)	Nursing Facility Performance Monitoring Data Instrument (Texas)	Kleinsorge & Koenig (lowa)	Great Lakes/ Michigan Family Satisfaction Survey Instrument	West Virginia AHCA Chapter	Life Services Network
SUB-DOMAINS											
Family Involvement	N	Y =	N	N	N	N	N	N			N
Non-clinical staff Services (e.g., Admissions coordinator, Finance, Administration, Social Services, etc)	Y	Y	Y	Y	N	N	Y	Y			N
Laundry	Y	Y	N	N	N	N	N	N			Υ

Key [Y=Yes, N=No, NA=Not Applicable].

Notes:

Source: Abt Associates Inc.

<sup>\*</sup> Some instruments explicitly cover and report on these domains, while others include questions covering the basic content. Domains contain different sets of questions. Questions covering the same content area may appear in different domains.

<sup>=</sup> Present on Discharge Resident Survey only.

Table 3:

Core Domains - Family Surveys

DOMAINS *	Vital Research (Ohio Department of Aging Family Satisfaction Survey)	Mylnner View Family Satisfaction Survey	Rutgers Satisfaction Assessment Tool- Nursing Home Family (Massachus etts)	Press- Ganey Nursing Home Family Survey	NH-CAHPS Resident Survey	NRC + Picker Family Survey (Canada)	Nursing Facility Performance Monitoring Data Instrument (Texas)	Kleinsorge & Koenig (lowa)	Great Lakes/ Michigan Family Satisfaction Survey Instrument	West Virginia AHCA Chapter	Life Services Network
CORE DOMAINS			·	•		,	,	, ,			
Overall Assessment	Υ	Y	Υ	Υ		Y			Υ	Υ	
Activities	Υ	Y	Υ	Υ		Y			Υ	Υ	
Facility Environment (e.g., Facility Appearance, Room, Maintenance, Housekeeping, etc.)	Y	Y	Y	Y		Y			Y	Υ	
Food (e.g., Meals, Dining, Food)	Y	Y	Y	Υ		Y			Υ	Υ	
Autonomy/Privacy	Y	Υ	Υ	Υ		Y			Y	Υ	
Clinical Care and Treatment (Physician and Nursing Care)	Y	Υ	Y	Υ		Υ			Υ	Υ	
Personal Care (e.g., Direct care, Nurse Assistants, Personal Care, etc.)	Y	Y	Y	Y		Y			Y	Υ	
Staff Interaction – Clinical and Non-clinical Staff	N	Y	Y	N		Y			Y	Υ	
SUB-DOMAINS											
Family Involvement	N	N	N	N		Υ			Υ	Υ	

Table 3:

#### **Core Domains - Family Surveys**

DOMAINS *	Vital Research (Ohio Department of Aging Family Satisfaction Survey)	Mylnner View Family Satisfaction Survey	Rutgers Satisfaction Assessment Tool- Nursing Home Family (Massachus etts)	Press- Ganey Nursing Home Family Survey	NH-CAHPS Resident Survey	NRC + Picker Family Survey (Canada)	Nursing Facility Performance Monitoring Data Instrument (Texas)	Kleinsorge & Koenig (lowa)	Great Lakes/ Michigan Family Satisfaction Survey Instrument	West Virginia AHCA Chapter	Life Services Network
Non-clinical staff Services (e.g., Admissions coordinator, Finance, Administration, Social Services, etc)	Y	Y	Υ	Y		Υ			Y	Υ	
Laundry	Y	Y	Υ	N		N			N	N	

Key [Y=Yes, N=No, NA=Not Applicable].

Notes:

Source: Abt Associates Inc.

<sup>\*</sup> Some instruments explicitly cover and report on these domains, while other include questions covering the basic content. Domains contain different sets of questions. Questions covering the same content area may appear in different domains.

#### 4.3.5 Length of Tool

Survey length includes both the number of items or questions in the tool and the time it takes to complete the survey. As Table 4 demonstrates, the number of items in existing resident survey instruments ranges from 12 to 71, and in family surveys the range of items is from 23 to 66.

Survey length is critical because studies have indicated that nursing home residents may become fatigued and lose focus after a while. Given that a number of surveys take approximately 15 minutes on average to administer, we conclude that it is quite reasonable and sensible to adopt a questionnaire that takes 15 minutes on average to complete.

#### 4.3.6 Type or Format of Survey Items

The format in which survey responses are collected impacts the types of data analytic techniques that may be employed. Data collected as dichotomous variables (yes/no) are limited in that only minimal variability can be described (thus, more items are required). The benefit of dichotomous response categories are easy to answer, the burden on respondents is minimal (Fouladi, 1999) and thus the number of frail elderly able to respond is maximized (New England States Consortium, 2001).

Rating scales are frequently used to provide additional response detail. A rating scale lists an ordered series of response categories for a given variable; these categories fall within an underlying continuum. A numerical value is assigned to each category (Burns et al, 1987). For example, the Likert scale was designed to determine the opinion or attitude of a subject and contains a number of declarative statements typically followed by five categories of responses (strongly disagree, disagree, uncertain, agree and strongly agree). Modifications exist that vary the number of scale responses, whether or not adjective descriptors are used along with the numeric responses, the types of numeric labels used, and the order in which the responses are presented.

Some surveys combine the use of dichotomous items with scaled responses. First a specific yes/no question is asked followed by asking how the respondent would describe the extent of their agreement or disagreement (Edwards et al, 2000). The yes/no format helps the elderly in particular to focus on the specific aspect of patient care they are being asked to evaluate. Response choices may also be varied to include, "yes, definitely", "yes, I think so" and "no, definitely not." This combination method may produce different results than the true Likert scale but the opportunity to include respondents with some impairment (who perform better on yes/no type questions) may outweigh measurement concerns. Similarly, responses of "always", "often", "sometimes", and "never" may be more appropriate than yes/no options for nursing home consumers because of the ongoing nature of the contact that residents have with nursing staff (Mostyn el al, 2000).

The surveys reviewed utilize very different response options ranging from simple dichotomous responses such as yes/no to detailed rating scales ranging from 0-10. The selection of different response options may affect the respondents' answers in undesirable ways. Experts recommend conducting focus groups and cognitive testing to evaluate different response options. Most of the developers have conducted cognitive testing and elicited feedback from nursing home residents about their response options. It is unclear if any one response option is superior to another. Head to head testing does not appear to have been done and reported in the literature with respect to nursing home satisfaction instruments. Most of currently available satisfaction tools utilize some form of Likert scale (e.g., strongly agree to strongly disagree) but with different wording and numbers of options. For example, some range from very satisfied to very unsatisfied, while others use ordinal scales such as fair, poor, good, excellent. While they differed in their response options, all appear to have conducted appropriate evaluations to support their response options. *Therefore, we do not have a recommendation for any particular response option; but believe that Maryland will need to consider* 

how the response options for each of their tools fit the needs of Maryland nursing home residents and information consumers (potential residents and their families) will want.

# 4.3.7 Summary of Resident and Family Member Survey Characteristics and Implications for Maryland

Table 4 summarizes the characteristics of the existing resident and family consumer satisfaction surveys. As displayed in the table, five of the nine resident surveys reviewed are interviewer-administered, and therefore potential candidates for use by Maryland. These surveys were developed by the following entities: NHCAHPS; NRC Picker; Rutgers University; Vital Research; and the State of Texas. Four of the five specify the cognitive screening tool or method utilized to include only those residents cognitively capable of responding. NRC Picker does not specify the cognitive screening criteria that facilities should use when selecting residents to be interviewed, because they encourage selection of all nursing home residents for interview. This group does not exclude cognitively impaired residents from satisfaction measurement.<sup>4</sup>

Each of the five interviewer-administered resident surveys contains most of our identified core domains, including a domain or item for assessing overall resident satisfaction. Reported lengths of time to complete interviews range from 15 to 30 minutes. The number of items across the interviewer-administered surveys ranges from 15 (Texas) to 71 (NRC Picker). With 71 items, the NRC Picker tool is the one that requires, on average, 30 minutes to complete. The Rutgers University tool, referred to as the Rutgers Satisfaction Assessment Tool (RSAT), has two versions, each with a different number of items. The short form, used in a pilot test for Maine, has 22 items. The longer form (RSAT-35) used in New Jersey has 35 items. All five surveys use either scaled response categories exclusively, or in combination with yes/no items.

The tool that differs the most among the five is that developed for use in Texas; for this reason, we see limited value in Maryland's adoption of this particular instrument. Texas has essentially a "mission-driven" approach to nursing home resident satisfaction data. The 15-item satisfaction tool is just one component of a larger tool, the "Nursing Facility Performance Monitoring Data Instrument". The content of the tool, which includes review of MDS-based quality indicators, is made up of clinical care and other quality dimensions that the State targeted for tracking overall facility quality and for encouraging quality improvement. Though the satisfaction component of the instrument has core domains, such as Food Service and Overall Satisfaction, there are state-specific clinical items not found in other satisfaction surveys, such as an item about toileting. This issue, along with physical and chemical restraints, is an area identified as of particular concern to Texas. Another way in which Texas is set apart from other consumer satisfaction data collection and reporting initiatives is that the State does not collect data from every Texas facility on some periodic schedule and then report a facility-specific measure of satisfaction. Rather, a random sample of 2000 residents (of 8000 total statewide) per year are surveyed, and the data aggregated to a State-level satisfaction measure, rather than a facility-specific measure. This allows the State to track the industry and the overall quality of care being delivered in Texas (personal communication with Dr. Cortez, 2004).

<sup>&</sup>lt;sup>4</sup> Interviewers are instructed to exclude only those residents who are non-verbal, too sick to respond, or who refuse. Further instructions are to attempt the interview three times before excluding any other residents.

Table 4:
Survey Characteristics

	Vital Research (Ohio Department of Aging Satisfaction Survey)	Mylnner View Satisfaction Survey	Rutgers Satisfaction Assessment Tool-Nursing Home	Press- Ganey Nursing Home Survey	NH-CAHPS Resident Survey	NRC + Picker	Nursing Facility Performance Monitoring Data Instrument (Texas)?	Michigan Consumer Guide for Nursing Homes +	Kleinsorge & Koenig (lowa) ?	West Virginia AHCA Chapter +	Life Services Network
Resident survey is conducted as an interview	Y	N	Υ	N	Υ	Y	Y		N		N
Family survey is conducted as an interview	N	N	N	N		N		N		Z	N=
Cognitive screen to exclude residents is utilized	Y	N	Y	N	Y	N	Y		N	N	N
Includes global satisfaction question(s)	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y
Contains core content areas **	Y	Y	Y	Y	Y	Y	Y (except for environment)	Y	Y	Υ	Y
Number of items in resident survey (including demographic items)	48	30	22 – ME 35 - NJ	52	28	71	15		31		46
Number of items in family survey (including demographic items)	59	31	65	50		36		38		36	N/A
Average time to complete survey	15 MIN	15 MIN	22 MIN (NJ)	Not available	Not available	30 MIN	20 MIN	Not available	Not available	Not available	Not available

Table 4:

#### **Survey Characteristics**

	Vital Research (Ohio Department of Aging Satisfaction Survey)	Mylnner View Satisfaction Survey	Rutgers Satisfaction Assessment Tool-Nursing Home	Press- Ganey Nursing Home Survey	NH-CAHPS Resident Survey	NRC + Picker	Nursing Facility Performance Monitoring Data Instrument (Texas)?	Michigan Consumer Guide for Nursing Homes +	Kleinsorge & Koenig (lowa) ?	West Virginia AHCA Chapter +	Life Services Network
Type of question in resident survey (Scaled, Y/N) ***	Scaled + Y/N	Scaled	Scaled	Scaled	Scaled + Y/N	Scaled	Scaled		Scaled		Scaled
Type of question in family survey (Scaled, Y/N) ***	Scaled + Y/N	Scaled	Scaled	Scaled		Scaled		Y/N +Scaled		Scaled	N/A

Key: [Y=Yes, N=No, NA=Not Applicable].

Notes:

Pesigned for residents, however families are permitted to complete if resident unable

- + Designed for families, however residents may complete if able.
- = Family survey under revision. To be available February 2004.
- \*\* Core content areas include: Activities, Environment, Food/Meals, Autonomy/Choice/Dignity, Clinical Care & Treatment, Personal Care and Staff Interactions. Not all survey tools report results for these core areas, but each contains one or more questions within these areas.
- \*\*\* A wide variety of Likert scales are used in surveys with differing numbers of point systems with and without numeric and word descriptors at points on the scales. Many surveys also use open-ended questions (usually in a comments section) for quality improvement but are not used for scoring purposes and therefore not included.

Source: Abt Associates Inc.

#### 4.3.8 Measurement Properties and Design Features of Survey Instruments

The accuracy of information derived from consumer satisfaction tools is influenced by the characteristics associated with the respondents providing the information (e.g., age, educational, or cognitive status) and methodological factors associated with characteristics of the tool and its administration. Characteristics of the tools include the subject matter (see "core domain" discussion below), the format and language in which the questions/statements are presented, the scales utilized to measure and record the responses and the statistical testing employed to describe the psychometric properties. Psychometric properties, which include the concepts of validity and reliability, provide essential information on the quality of the potential assessments and an effective means to compare available instruments. These properties of survey development and psychometric features are described briefly below, and were used in our evaluation of existing nursing home consumer satisfaction instruments. Appendix F contains a much more detailed discussion of the various measurement issues and survey instrument properties that must be considered in the design or selection of a survey instrument.

#### Survey Development

Survey developers often spend enormous amounts of time developing the items and the response scales, and testing them to obtain input from potential respondents about items that might be difficult or confusing to respond to. Several of the issues in survey development are described here.

#### **Cognitive Testing**

Structural components of the survey or interview, such as the language level (e.g., reading level at 8<sup>th</sup> grade), question format, order of items, number and complexity of questions, and rating scales may significantly impact the accuracy of the information obtained. Many survey tools are therefore "cognitively tested" through focus groups or in-depth interviews following survey completion to determine how well the survey structure works, and how comprehensible the survey questions are to potential respondents. There are many survey tools in those that we reviewed that have undergone cognitive testing, which should therefore be more than adequate for Maryland's needs.

#### **Memory Recall Items**

The decrease in working memory capacity (the amount of information that can be stored and processed simultaneously at a point in time) found among older people is a biological process accompanying normal aging (Edwards et al., 2000) and declines even further with the development of dementia. Studies on the ability of the elderly to recall information report mixed results; some of this research indicates that recall of health-related events (especially the frequency of events) that happened in the recent past is diminished (New England States Consortium, 2001). During cognitive testing of the Nursing Home Consumer Assessment of Health Plans survey, researchers found that "recall and placing things in time" were very difficult for elderly nursing home residents, and this group has therefore elected not to use such items in the NHCAHPS (RTI, 2003). We also recommend that satisfaction tools avoid use of questions requiring memory recall of specific events and frequency.

#### Measurement Properties

Once the survey questions have been developed and refined through focus groups and cognitive testing, administration to a sufficiently large sample of residents provides enough information to conduct reliability and validity testing of the instrument (see below).

#### **Reliability Testing**

Inter-rater and intra-rater reliability measure the agreement in results when performed by two or more individuals (inter-rater) or by the same individual two or more times (intra-rater). If the test's inter-rater or intra-rater agreement is poor then differences in test scores may reflect differences in reliability rather than true differences in the patients' status. Inter-rater and intra-rater reliability are often represented through the calculation of a kappa value, which indicates the degree of agreement between ratings after correcting for chance agreement. Kappa values for a given test should exceed 0.5 to 0.7 for inter-rater evaluations and 0.9 for intra-rater evaluations (McDowell and Newel, 1996). Reliability can also be calculated in the form of a correlation coefficient. However, high correlation coefficients can be misleading, since responses can be correlated but disagree. For example, if each patient consistently scores 25 percent higher on the second administration of a test, their test scores will be highly correlated even though they do not agree. In order to adjust for this type of difference in agreement, the interclass correlation coefficient such as Kendall's index of concordance should be calculated rather than the Pearson correlation or rank order coefficients that do not adjust for differences in agreement (McDowell and Newel, 1996).

Test-retest reliability is a form of intra-rater reliability. Test-retest reliability measures the extent to which a test produces the same result at different times for the same subject. The time interval between testing can bias the test-retest reliability. For example, if the test is repeated with too short of an interval, memory from the first administration may influence the responses to the second administration and thus, falsely inflate the test-retest reliability. Conversely, changes in the patient's status that occur between tests can also influence the patient's responses and lower the actual test-retest reliability.

#### **Validity Testing**

Validity describes the extent to which the instrument measures other concepts other than the one intended, which is reported as systematic error. Validity will vary from one sample to another and should be used to validate the use of an instrument for a specific group or purpose rather than being directed at the instrument itself (Burns, et al, 1987). There are three types of validity – content validity, predictive or criterion validity and construct validity. Content validity, which includes face validity, is a primitive measure that basically verifies that the instrument appears to measure the intended concept. This often involves experts reviewing a tool to evaluate the content (Burns). Construct validity is the degree to which a measurement strategy measures the construct it was designed to measure (Burns).

Measures of internal consistency represent a special application of construct validity to composite items on a questionnaire. These measures evaluate the extent to which all the items on a questionnaire that make up a composite score reflect the same underlying construct. For example, questions on a dementia screening test should evaluate cognitive function and correlate with the composite score. Internal consistency is often assessed by calculating the Cronbach's coefficient alpha (McDowell and Newel, 1996). Cronbach's alpha essentially represents the average of all the correlations between each question and the total score of all questions. A Cronbach's alpha of >0.8 is considered to be excellent, >0.7 as good and <0.4 to be poor (McDowell and Newel, 1996). Further description of types of validity and validity testing may be found in Appendix F.

# 4.3.9 Summary of Existing Survey Development and Measurement Properties and Implications for Maryland

Table 5 summarizes the development and measurement properties of the eleven survey tools reviewed. The only survey tool among the resident and family candidate tools that has not undergone any developmental testing, such as cognitive testing, nor any reliability or validity testing is the West Virginia family survey. We therefore recommend against further consideration of this instrument.

The developmental feature we looked most closely at in this review was whether instruments had undergone cognitive testing to determine potential respondents' ability to comprehend the items and the ability of the tool, through its response categories and other components, to elicit accurate, unbiased responses. The use of recall items was also part of this review, as another indicator of the concern placed on survey development by the developer. None of the instruments reviewed utilize memory recall and thus meet one of our basic developmental criteria. In terms of cognitive testing, we only obtained information from four survey developers on this topic. All four (MyInnerView, NHCAHPS, Rutgers University and Vital Research) used cognitive testing or interviewing to analyze the survey structure (e.g., language level, order of items, number and complexity of items) in relation to the accuracy of the survey information obtained and to make resulting refinements to their instruments prior to field testing. We will continue to try to obtain further information from survey developers on other tools as Maryland begins the survey tool selection process.

As can be seen in Table 5, we also had some difficulty in obtaining information regarding survey testing. Again, with the exception of West Virginia, all survey tools reviewed have undergone some level of reliability and validity testing. However, the extent of that testing, the sample sizes used for testing, and the implications of some of those findings are not able to be reported here. We will continue our efforts to obtain the relevant data to inform the survey tool selection process.

Measurement and Development Properties

Table 5:

	Vital Research (Ohio Department of Aging Satisfaction Survey)	MyInner View Satisfaction Survey	Rutgers Satisfaction Assessment Tool-Nursing Home	Press-Ganey Nursing Home Survey	NH-CAHPS Resident Survey	NRC + Picker	Nursing Facility Performance Monitoring Data Instrument (Texas)	Michigan Consumer Guide for Nursing Homes	Kleinsorge & Koenig (lowa)	West Virginia AHCA Chapter	Life Services Network
Avoids recall items*	Υ	Y	Υ	Y	Υ	Υ	Y	Y	Υ	Υ	Y
Development of instrument included cognitive testing on survey items**	Y	Y	Y	Not available	Y	Not available	Not available	Not available	Not available	N	Not available
Sample size used to develop the instrument	Not available	Not available	New Jersey tested with 30 residents/facility in 28 facilities Maine tested in 40 facilities Massachusetts tested with 1,136 family respondents	Not available	Developed with national MDS data, resident and family focus groups, cognitive assessments and interviews with approx. 50 residents	Not available	122 residents in 6 facilities	Not available	50 residents and 9 family members	No pilot testing	Not available
Reliability Testing***	Y	Y	Υ	Y	Not available	Not available	Y	Υ	Y	N	Y
Validity Testing****	Y	Y	Y	Y	Not available	Y	Y	Y	Υ	N	Y

Key [Y=Yes, N=No, NA=Not Applicable].

#### Notes:

Source: Abt Associates Inc.

<sup>\*</sup> Avoids Recall Items describes those surveys that pose questions without any reference to a particular time period, e.g., Are your care needs met? In contrast to a question that references a particular time period, e.g., In the past six months, have your care needs been met?.

<sup>\*\*</sup> Cognitive testing includes analyses of survey structure e.g., language level, question format, order of items, number and complexity of questions and rating scales in terms of how these structures impact the accuracy of survey information.

<sup>\*\*\*</sup> Instruments that have performed some type of reliability testing, i.e., performed one or more statistical tests to confirm how consistently the measurement technique measures the concept of interest (e.g., test-retest reliability, correlation analysis, and inter-rater reliability testing).

<sup>\*\*\*\*</sup> Instruments that have performed some type of validity testing, i.e., performed one or more statistical tests to measure the extent to which the instrument actually reflects the abstract concept being examined (e.g., content validity may be tested by expert panels, construct validity may be tested by factor analysis or analysis of variance).

# 5.0 Summary of Findings and Their Implications for Maryland

The literature review and discussion with consumer satisfaction survey developers and states involved in data collection initiatives revealed that there are numerous existing survey tools available for measuring both nursing home resident and family member or caregiver satisfaction. Thus, there appears to be no motivation for Maryland to incur the expense of independently developing a state-specific survey.

Based upon the premise that any instrument selected by Maryland will be utilized to publicly report a measure or measures of consumer satisfaction - and that therefore the data gathered through the use of that tool must be accurate and reliable - we have determined that there are four fundamental criteria that the selected instrument must meet. The resident survey tool must: 1) be valid for the population of interest (i.e., measure the satisfaction and quality of life of the *resident*); 2) have undergone rigorous development and testing; 3) be implemented in every certified home in Maryland; and 4) be collected under tightly controlled circumstances (i.e., resident surveys must be completed by residents who are part of a purposive sampling frame). The greatest implication of these parameters for Maryland is that the resident survey tool selected must be an interviewer-administered survey, if at all feasible. A self-administered family survey is recommended for satisfaction measurement in that population. Our findings are organized around these parameters.

Of nine resident surveys reviewed in detail, five were found to be interviewer-administered resident surveys. These surveys were developed by the following entities or are referenced by the following names: NHCAHPS, NRC Picker, Rutgers University, Vital Research and the State of Texas. Four of the five resident surveys are accompanied by a recommended cognitive screen, which we believe is an important consideration in the selection of an instrument. The NRC Picker resident survey used in Canada is unique in that it does not attempt to exclude cognitively impaired residents. We would need to pursue discussions with NRC Picker to understand the full implications of this methodology and its impact on public reporting, but see no reason *not* to consider the survey at this point.

Since the content of the tool and the length of the tool are also paramount issues, we reviewed each survey to determine their characteristics. In terms of the topic areas or domains addressed in the survey tools, we found that all but one – that used by the State of Texas – contain the eight core domains identified as vital to consumers. Though the Texas resident survey appears on Table 2 to address six of the eight identified core domains, the true content of the survey is very different from other interviewer-administered resident surveys. The survey's content is driven by overarching quality improvement goals that are unique to Texas; thus, we believe this survey to be of limited value to Maryland. The practice in Texas does raise another important consideration, which is that Maryland needs to consider whether there are unique, overarching state-specific issues that public reporting of consumer satisfaction should address. If so, state-specific domains, or survey items, may need to be added to an existing tool.

Our review revealed that the length of time to administer the resident surveys varies from 15 to 30 minutes, which is within expectations, given the literature on this topic, and the number of survey items ranges from 15 to 71. The NRC Picker survey contains 71 items, which may be overly burdensome for Maryland nursing home residents. It would be worth exploring with this group if a shorter version of the resident survey has been or is being developed and tested.

Of the seven family surveys reviewed in detail, including Great Lakes, MyInnerView, NRC Picker, Press Ganey, Rutgers University, Vital Research and West Virginia, we found that all are self-administered surveys and all but two contain the core domains. The family surveys developed by

Press Ganey and Vital Research do not address "staff interaction" issues as part of their content. We do not have information about the length of time required to complete the family surveys, but the number of items in these seven surveys ranges from 31 to 55. We will want to further explore the time required to complete the surveys prior to Maryland selecting a family survey in order to inform the process. The desired goal of course would be to select the least burdensome (i.e., lengthy) survey to maximize family response rates.

With the exception of the West Virginia family survey, all of the resident and family satisfaction surveys reviewed appear to have been adequately developed and tested for the following developmental and measurement properties<sup>5</sup>:

- Core content
- Comprehension
- Ability to elicit accurate response
- Validity
- Reliability

In summation, there are existing resident and family satisfaction survey tools that are adequate to meet Maryland's basic needs. We therefore see no need to incur great expense on an independent, state-specific survey development effort. Given that the "management," or control, of the data obtained through satisfaction surveys is vital to the accuracy of public reporting of those data, we recommend that, if at all feasible, the State adopt the use of an existing interviewer-administered resident survey. This method of survey administration allows for the most control and management of the resident sample, and of who actually completes the resident survey (i.e., residents complete these surveys via the interviewer, rather than family members or others completing the surveys for the residents). We recommend that the State adopt the use of an existing self-administered family satisfaction survey, as well.

Though no one of the resident satisfaction surveys is perfect, there are several of the interviewer-administered resident surveys that meet Maryland's basic needs, including NRC Picker, the Rutgers Satisfaction Assessment Tool (RSAT) and the Vital Research resident survey, for the following primary reasons:

- Each is in use in states or a subset of facilities within states;
- Each contains the core set of satisfaction domains that this group believes must be present, at a minimum, to address nursing home resident consumer satisfaction issues; and
- Each has undergone extensive development and testing that can help to generate a level of confidence around the accuracy of the data obtained with these instruments.

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<sup>&</sup>lt;sup>5</sup> Since we did not obtain all psychometrics and other properties (e.g., sample, response rates) for all surveys reviewed, there may be a need to further explore these issues as the MHCC considers a subset of these instruments for use in Maryland nursing facilities.

<sup>&</sup>lt;sup>6</sup> Though we did not receive and review psychometric properties of the NRC Picker instrument, personal correspondence indicates that this survey has been adequately developed and tested, which we will continue to try to confirm.

Though the NHCAHPS is an instrument that will eventually have the benefit of wide-scale testing, has undergone extensive development and meets most of the criteria listed above, this tool is not in use in any nursing facilities. Federal plans do not call for pilot testing of the tool until Spring/Summer of this year, with resulting modifications to the instrument occurring in the Fall of 2004. We believe that it is likely that this schedule will be delayed; thus, a fully tested, finalized NHCAHPS tool may not become available until well into 2005 or even 2006. The NHCAHPS, therefore, does not seem a viable option for fulfilling Maryland's legislative mandate.

It is, of course, important for Maryland to consider the implications of selecting a survey tool and survey implementation methodology that differs from what the federal government may eventually require. Nursing facilities certainly may argue that it would be too burdensome to initiate consumer satisfaction survey data collection using one tool, only to have to replace it with another, federally-mandated tool. We discussed this issue with the State of Rhode Island's contractor, since that State has efforts underway to publicly report nursing home consumer satisfaction data, and has chosen to move forward with a state-selected tool, rather than to wait for NHCAHPS. Rhode Island approached AHRQ to express interest in using the NHCAHPS as a pilot state. Since the survey was still in developmental testing, the use of this tool would not meet Rhode Island's timeline. Since the actual implementation of a federal nursing home consumer satisfaction initiative is yet to be defined, the experience to be gained by independent, statewide survey implementation will likely benefit the national initiative.

# 6.0 Preliminary Recommendations and Next Steps

In order to meet the legislative mandate for public reporting of consumer satisfaction information, Maryland will need to adopt a single, standardized resident consumer satisfaction survey for use in every certified nursing facility. One survey should be selected for residents, with a separate survey selected for family members/caregivers. Given our review, we believe that there are several resident and family consumer satisfaction surveys that are in existence today that will meet Maryland's needs, though there may need to be some exploration of whether state-specific domains or items need to be and can be added to an existing tool. If at all possible, Maryland should consider the selection of an interviewer-administered resident survey in its deliberations.

The following existing survey instruments are candidates for use by Maryland:

#### Interviewer-administered Resident Surveys

- NRC Picker
- Rutgers University
- Vital Research

#### Family Surveys

- Great Lakes
- MyInnerView
- NRC Picker
- Press Ganey
- Rutgers University
- Vital Research

#### **Next Steps**

There are several activities that will help to further guide the selection of a consumer satisfaction survey. One fundamental issue is to determine if there are unique, state-specific issues that Maryland must address in its satisfaction data collection and resulting public reporting. Like Texas, Maryland may have outstanding quality issues or concerns that any satisfaction data collection effort should assess. Such issues need to be explored with the various stakeholders, including LTC industry representatives, individual facilities, consumer groups, regulators, payors and others.

There is a need to further explore the candidate resident and family surveys, as many details of flexibility of use, implementation and cost were not ascertained during this preliminary review. Questions to ask of survey developers include, but are not limited to, the following:

- What is the required sample size and response rate for public reporting?
- Can additional domains/items be added?
  - Does the developer have a valid set to offer?
- What is the recommended sampling frame for the instrument?
- What response rates have been obtained during implementation of the survey, on average?
- Are there licensing fees, copyright issues, data ownership issues or other issues and costs associated with the selection of one of the candidate proprietary satisfaction surveys?

Another issue of considerable importance is the need to understand the potential impact of a mandated data collection effort on Maryland nursing facilities. It would be beneficial to explore the experience, from the nursing facility's point of view, with various survey-associated processes (e.g., interviewer-administered surveys, mail surveys, obtaining consent to complete surveys, compiling lists of family member names and addresses for survey contractors).

Finally, there are many issues associated with the public reporting of consumer satisfaction that will need to be examined. Sampling issues, survey response rates and other concerns that are generally referred to as survey implementation issues are also analytic concerns for public reporting. Adequate sample and adequate variation of survey responses will play significantly in Maryland's ability to accurately portray the level of consumer satisfaction within facilities and across the state. The analytic and other considerations about public reporting will need to be further explored as Maryland moves forward with implementing its nursing home consumer satisfaction public reporting requirement under §19-134(d) of the Maryland Health-General Article.

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