Memorandum Comparing Four States' Comprehensive Assessment Systems

May 9, 2013

University of California Los Angeles
Borun Center
Lhasa Ray, MD, MS
Kisa Fulbright
Debra Saliba, MD, MPH

University of California San Francisco
Robert Newcomer, PhD

University of Southern California
Kate Wilber, PhD

The team acknowledges guidance on this document from Lisa R. Shugarman, PhD, The SCAN Foundation.

Supported by a grant from The SCAN Foundation, dedicated to creating a society in which seniors receive medical treatment and human services that are integrated in the setting most appropriate to their needs. For more information, please visit www.TheSCANFoundation.org.

University of California Los Angeles Borun Center for Gerontological Research

Introduction and Summary

Purpose of this memorandum

The State of California intends to adopt a uniform and comprehensive assessment system for use in Medi-Cal home- and community-based services (HCBS) programs in the state. This analysis seeks to support California's planned effort by providing information on the content of four selected states' uniform assessment instruments for adults seeking community-based long-term services and supports (LTSS). We review sample universal assessment instruments (UAI), their associated data collection approaches, and their use for eligibility and needs determination, care planning, and quality assurance systems. These states were selected to serve as learning-models for the State of California so that the work of developing an instrument and associated assessment system may be informed by the successes and lessons learned elsewhere.

Each selected state self-identifies as having one or more HCBS programs for which a comprehensive assessment instrument has been implemented. We identified these instruments and associated programs for analysis.

Overview of Instruments

The example states we selected were Michigan, New York, Pennsylvania, and Washington. Through interviews with key informants we identified one or more instruments used in each state's comprehensive assessment system. We reviewed Michigan's Level of Care Determination (LOCD) screening tool and the InterRAI-Home Care (iHC), their core assessment instrument. New York's universal assessment system (UAS-NY) is made up of the InterRAI Community Health Assessment (CHA) along with both interRAI and program-specific supplements. We reviewed the interRAI CHA and the functional supplement. Washington's Comprehensive Assessment Reporting Evaluation (CARE) was created by modifying and supplementing Oregon's MDS-HC-based instrument and is the only instrument we studied in the state. Pennsylvania's assessment system includes the Level of Care Assessment (LOCA) and the Care Management Instrument (CMI) service plan development tool, both of which we included in this report.

General themes arising from the project include the following:

- Sets of instruments that make up each comprehensive assessment system ultimately assess on a similar range and depth of domains and topics. Instruments differ primarily as a reflection of local programs and system organization.
- Three of the four instruments are designed with algorithms that trigger elements of the care plan and have built-in classification systems to organize assessed individuals according to anticipated service use.
- All assessment systems use electronic instruments housed in a computerized infrastructure that allows for data aggregation and system-wide analyses.

Summary of important themes

State and agency leaders interviewed for this analysis were asked to share overarching recommendations and reflections on developing comprehensive assessment systems and instruments. These themes are addressed in greater detail throughout the body of this report and most specifically on page 15. Highlights of these recommendations include the following:

- Determine the functions and objectives of any new assessment instrument and system – including the relationship to managed care assessments and service delivery – prior to selecting or designing an instrument and defining process elements.
- Using empirically tested measures may increase the accuracy of assessment data and facilitate resolution of legal challenges.
- Computerized instruments with minimal opportunity for free-text data entry allow for efficient processing of individual results and support quality assurance tasks and program planning.
- Instruments that are compatible with the federal Minimum Data Set (MDS) provide the opportunity to conduct quality and utilization analysis across settings of care.
- Stakeholder engagement is most valued in the early stages of goal setting and the later stages of process design.
- Implementation plans that incorporate beta testing, piloting, and regional deployment schedules allow new assessment instruments and systems to be modified as needed on a manageable scale.

Assessment Instruments and Associated State Programs

States and instruments selected for review

We selected states whose assessment processes or instruments are relevant to the array of HCBS programs in the State of California, to the size and diversity of its population, and to the county-oriented service delivery system in the state. Specifically, we worked with the California Uniform Assessment Instrument Advisory Group to identify key characteristics for selecting our exemplar states. We then used expert input to choose states that possess one or more of these characteristics from the collection of states known to employ comprehensive assessment for one or more of its HCBS programs. In each state, the assessment instrument and the associated processes and programs we reviewed were those that each state's program leader(s) identified as being comprehensive. For full details on the methodology we employed, see Appendix A. The state selection criteria we applied and the instruments we reviewed are listed in Table 1.

Table 1. Example states selected, key characteristics guiding selection, and instruments analyzed.

State Selected	Key Characteristics	Instrument(s)
Michigan	Use of an interRAI-based tool	interRAI HC MI Choice Assessment
New York	A large state with a diverse population and a county-oriented LTSS system; recent experience with assessment system development, implementation, and stakeholder engagement.	Uniform Assessment System-New York (UAS-NY) Community Assessment, comprised of modified versions of the interRAI HC Community Health Assessment (CHA) and interRAI Functional and Mental Health Supplements
Pennsylvania	Developed data-sharing processes	Level of Care Assessment (LOCA) and Care Management Instrument (CMI)
Washington	Use of a locally-developed instrument; example of a gold-standard assessment system	Comprehensive Assessment Reporting Evaluation (CARE)

Medicaid program data and state HCBS programs

Michigan

Michigan has a population of 9.9 million[1], of which 2.1 million[2], or 21% of the population, is enrolled in Medicaid. Home- and community-based personal assistance services for adults without developmental disabilities are provided through a State Plan Option personal care program called Independent Living

Services (see Appendix B). Individuals who meet nursing facility level of care (NF LOC) criteria and wish to remain in the community may apply for services through the MI Choice 1915(c) Medicaid waiver program, which serves approximately 14,500[3] individuals annually. According to one informant for the state, roughly half of the approximately 59,000[4] individuals served by Independent Living Services meet the nursing facility level of care standard as defined for MI Choice but do well with the more limited set of personal care and homemaker services provided through the State Plan Option. Michigan's comprehensive assessment system is used for the MI Choice waiver. The State Plan Option PAS program uses a separate, more focused assessment.

Pennsylvania

Just over 2 million (18%) of Pennsylvania's 12.8 million citizens are enrolled in the state's Medicaid program. HCBS are provided through a number of Medicaid 1915(c) waivers, of which the largest in terms of enrollment and expenditures is the Aging Waiver, which serves approximately 29,000[5] individuals annually. The Independence Waiver is for younger adults with disabilities, and is second in level of expenditures despite providing services for about 5,000 individuals per year. Options is a state-only funded program for individuals who do not qualify for Medicaid. Enrollment is approximately 25,000 per year and does not require NF LOC eligibility. The Level of Care Assessment (LOCA) and Care Management Instrument (CMI) are used for aging and physical disability waiver programs, Options, and long-term care nursing facilities.

Washington

Washington State has a population of 6.9 million, of which 1.2 million (17%) are enrolled in Medicaid. The Community Options Program Entry System (COPES) Waiver serves approximately 34,000 seniors and individuals with disabilities who meet NF LOC criteria and receive services in the home. Medicaid Personal Care (about 26,000 annually[4]) is a state program that provides similar services to those who do not meet clinical criteria for COPES. Together these programs serve 95% of recipients of in-home assistance. Washington uses the Comprehensive Assessment Reporting Evaluation (CARE) for all long-term services and supports in the state, including in-home personal care, residential, and nursing facility care.

New York

New York State has the largest population (19.6 million) and percentage of citizens enrolled in Medicaid (5.2 million, or 27%). HCBS are provided through a number of programs that previously used many unique screening and assessment tools. A 2009 paper by the Medicaid Institute of the United Hospital Fund[6] reported that LTSS are provided to 247,000 individuals monthly through 12 distinct programs, ten of which cover HCBS. The largest program by enrollment is the Personal Care Services Program, which serves approximately 64,000[4] individuals annually who have at least 1 ADL limitation. The Long Term Home Health Care Program serves approximately 24,000 NF LOC seniors and individuals with disabilities per year. The Uniform Assessment System-New York (UAS-NY) will be implemented in 8 LTSS programs in the state[7], and excludes programs that serve individuals with developmental disabilities.

Comparing the content of assessment instruments

The assessment domains and topics included in the instruments we reviewed are presented in Table 2. The methods used to create this table are presented in Appendix A. Briefly, in a prior report we conducted a literature search for existing published standards for HCBS assessment. We drew on these standards to create a framework of recommended assessment domains and underlying topics. Topics recommended by one or more of these external standards are indicated with an asterisk. The domains and topics included by the example states' assessment instruments are arrayed across this framework. Any topics present in a state instrument that was not included by an external standard were added to the initial framework to create the expanded table shown here.

All states assess on all 8 domains and have topics that fall outside of this framework into a mixed category. Michigan and Pennsylvania's assessment systems consist of a more limited initial assessment followed by a more comprehensive one, while Washington achieves comprehensive assessment with one tool. New York's Community Assessment (CA) system begins with a modified version of the interRAI Community Health Assessment (CHA), which collects the core data set. Sets of responses to items in the CHA trigger assessors to administer the Functional and/or Mental Health Supplements, which prompt more in-depth exploration within those domains. The brief NY State Mental Health supplement (not shown) includes items on 9 topics including mental health service use history, mood and other psychiatric symptoms, substance use,

behavioral symptoms, suicide risk, hygiene, life stressors, and treatment adherence. At the time of this report New York was implementing its assessment system; consequently, data are not available on the percentage of individuals for whom one or both supplements is triggered.

Topics endorsed by one or more external assessment standards that are not incorporated by any state instrument include: cultural history/influences, health literacy, genetic history, readiness to change, sexual function and body image, adequate space in the home, caregiver willingness and ability to work with the care team, and client's learning and technology capabilities, stage in the life cycle, and self-care capability/unique strengths.

Externally recommended topics that were included by only one example state instrument are: spiritual support, ability to perform oral care, health goals/expectations/preferences, personal values or beliefs, transitional or discharge plan, community resources, housing stability, telephone access, transportation access, recreational/leisure pursuits, and plan of care supervision. History of abusive behaviors is an externally recommended topic that is included in Pennsylvania's CMI as well as the interRAI Mental Health Supplement (not shown).

Assessment of active legal issues is exclusive to Washington's CARE and was not an externally recommended topic.

Table 2. Example State Assessment Domains and Topics	(MI) LOCD[I]	(MI) iHC[II]	(NY) CHA[III]	(NY) Fnctl Supp[IV]	(PA) LOCA[V]	(PA) CMI[VI]	(WA) CARE[VII]
Background Information							
Active Legal Issues							X
Assessment Context		X	X		X	X	X
Collateral Contacts		X			X	X	X
Communication*	X	X	X		X	X	X
Comprehension		X	X				X
Cultural History and Influences*							
Demographics		X	X		X	X	X
Education*		X				X	
Formal Services and Providers*	X	X		X		X	X
Health Insurance*		X				X	
Health Literacy*							
Informal Support Systems*		X		X	X	X	X
Language Issues *		X	X		X	X	X
Legal Representatives/Documents *		X		X	X	X	X
Others Living in the Home *		X	X	X	X	X	X
Primary Caregiver *		X				X	X
Primary Health Care Provider *	X				X	X	X
Residential Status *		X	X		X	X	X
Source of Information					X	X	X
Spiritual Support *		X					
Veteran Status		X	X		X	X	
Financial Assessment							
Employment History *			X				X
Income/Assets/Other Private Resources *		X			X	X	X
Out-of-Pocket Expenses and Impact *		X	X			X	X
Program Eligibility *		X			X	X	X
Health							
Abuse or Neglect (potential for or history of) *		X	X			X	X
Activity Level		X	X				X
Allergies/Adverse Drug Events *		X	X			X	X
Assistive Devices or Adaptations *		X	X	X	X	X	x
Client Self-Rated Health		X	X				X
Continence *		X	X		X	X	X

[I] Medicaid Nursing Facility Level of Care Determination, Michigan, 2005
[II] MI-Choice Participant Information & Home and Community Based Services Assessment (Altered interRAI-HC), Michigan, 2008
[III] Community Health Assessment included in the Uniform Assessment System Community Assessment, New York, 2006
[IV] Functional Supplement, included in the Uniform Assessment System (UAS-NY) Community Assessment, New York, 2006
[V] Level of Care Assessment, Pennsylvania, 2012
[VI] Care Management Instrument, Pennsylvania, 2010
[VII] Comprehensive Assessment Reporting Evaluation, Washington, 2013
* Externally Recommended Standards[17]

Table 2. Example State Assessment Domains and Topics							
	(MI) LOCD[I]	(MI) iHC[II]	(NY) CHA[III]	(NY) Fnctl Supp[IV]	(PA) LOCA[V]	(PA) CMI[VI]	(WA) CARE[VII]
Dental Status *		X		X		X	X
Fluid Intake *		X	X				X
Gait & Balance Assessment/Falls *		X	X	X	X	X	X
Genetic History of Family Health *							
Hearing *		X	X			X	X
Improvement or Discharge Potential		X	X	X			X
Stability/Instability of Conditions		X	X	X			
Medical History, Active Diagnoses *	X	X	X	X	X	X	X
Medications *		X	X		X	X	X
Medication adherence *		X		X		X	X
Understanding of medications *						X	X
Mode of Nutritional Intake	X	X		X			X
Nutritional Status/Weight Change *		X	X	X	X	X	X
Pain *		X	X				X
Patterns of Health Services Use	X	X		X	X	X	X
Physical Exam *		X					X
Preventive Health		X	X				X
Skin Condition	X	X		X	X	X	X
Special Treatments *	X	X	X	X	X		X
Swallowing *		X		X		X	X
Tobacco Use		X	X				X
Vision *		X	X			X	X
Functional Assessment *							
Activities of Daily Living (ADLs)							
Ambulating *		X	X			X	X
Bathing *		X	X		X	X	X
Bed Mobility *	X	X	X	X			X
Dressing *		X	X		X	X	X
Eating *	X	X	X	X	X	X	X
Hygiene *		X	X		X	X	X
Mobility (in/out of home) *		X	X		X	X	X
Oral Care *		X					
Toilet Use *	X	X	X	X	X	X	X
Transferring *	X	X	X		X	X	X
Instrumental Activities of Daily Living (IADLs)							
Equipment/Supply Management *		X					
Managing Finances **		X	X		X	X	X
Managing Medications *		X	X		X	X	X
Meal Preparation *		X	X	X	X	X	X
Ordinary Housekeeping *		X	X		X	X	X
Shopping *		X	X		X	X	X
Stair Climbing		X	X		X	X	X

Table 2. Example State Assessment Domains and Topics	(MI) LOCD[I]	(MI) iHC[II]	(NY) CHA[III]	(NY) Fnctl Supp[IV]	(PA) LOCA[V]	(PA) CMI[VI]	(WA) CARE[VII]
Telephone Use *		X	X		X	X	X
Transportation *		X	X		X	X	X
Cognitive/Social/Emotional/Behavioral							
Alcohol or Other Substance Use *		X	X			X	X
Behavioral Symptoms *	X	X	X	X	X	X	X
Cognitive Functioning *					X	X	X
Level of consciousness					X	X	X
Judgment/decision-making capacity *	X	X	X			X	X
Memory *	X	X	X	X		X	X
Mood and Affect *		X	X	X	X	X	X
Other Psychiatric *	X	X	X		X	X	X
Psychological Therapy				X			X
Readiness to Change *							
Recent Change in Cognition/Delirium *		X	X	X			X
Services Use History		X					
Sexual Functioning/Body Image *							
Social Participation/Isolation *		X	X			X	X
Stressors		X	X				
Suicide Risk *		X					X
Use Of Physical Restraint		X		X			
Wandering	X	X	X	X			X
Goals and Preferences							
Advance Care Planning *		X					X
Care Goals, Expectations, Preferences *		X	X	X	X	X	X
Health Goals, Expectations, Preferences *							X
Personal Values or Beliefs *		X					
Transitional/Discharge Plan *							X
Environmental Assessment (Home, Community) *					X		
Access to Food		X		X			
Adequate Space *							
Communication with Utilities and Emerg. Svcs. *		X		X			X
Community Resources *						X	
Condition of Home		X		X		X	X
Emergency Preparedness *		X					X
Housing Accessibility *		X		X		X	X
Housing Stability *						X	
Neighborhood Safety *		X		X		X	X
Safety In-Home *		X		X		X	X
Telephone Access *		X					
Transportation Access *							X
Caregiver Assessment							
Availability to Provide Care *		X		X	X	X	X

Table 2. Example State Assessment Domains and Topics							
	(MI) LOCD[I]	(MI) iHC[II]	(NY) CHA[III]	(NY) Fnctl Supp[IV]	(PA) LOCA[V]	(PA) CMI[VI]	(WA) CARE[VII]
Emotional Competence/Stability *		X		X		X	X
History of Abusive Behaviors *						X	
Hours/Tasks *		X		X		X	
Physical Capacity *					X		X
Receiving Support Services						X	X
Stress or Need for Respite *		X		X		X	X
Willingness & Ability to Implement Care Plan *		X		X	X	X	X
Willingness & Ability to Work with Care Team *							
Other							
Family Dynamics *		X	X				X
Learning and Technology Capabilities *							
Need for Supervision					X	X	
Pet Care		X			X	X	X
Presence of Developmental Disability		X			X	X	X
Primary Mode of Locomotion Indoors		X	X			X	X
Recreational/Leisure Pursuits *							X
Self-Care Capability/Clients Strengths *							
Stage in Life Cycle & Related Developmental Issues *							
Supervision of Plan of Care (Client or Other)							X

Key Informant Interviews

Through review of state documents and interviews with key leaders from each state we gathered information about the history and development of comprehensive instruments and their associated assessment systems and processes, including reassessment and quality assurance strategies, data sharing solutions, assessor qualification and training, and prior or ongoing legal challenges or other unintended consequences of implementation. Conversations with state informants were guided by a set of discussion questions and prompts that we developed in partnership with the California Uniform Assessment Instrument Advisory Group, who contributed to and authorized the question set.

Instrument history and development

New York

New York's Uniform assessment grew out of a statewide Medicaid redesign initiative. The initiative identified creation of a comprehensive assessment process based on a core data set, automated needs assessment, and streamlined information access as central to improving the quality and efficiency of its Medicaid program. The Department of Health's Office of Long Term Care has led the project through its 6-year research and implementation timeline. Early work involved understanding the LTSS programs in the state and prioritizing domains of assessment that would form the core instrument. Stakeholders were engaged around the selection of assessment domains, then later for input on practical matters of system design. The state investigated existing comprehensive assessment systems with the goal of identifying an established instrument that was both empirically tested and able to be tailored to fit local programs and systems. They concluded that the interRAI Community Health Assessment met these requirements. As New York expands the uniform assessment system to additional HCBS programs, compatible interRAI tools will be considered. The state performed beta testing in 4 counties during the summer of 2012 and officially completed in November 2012; they began a gradual implementation of the system in March 2013, expecting all regions to be fully implemented by February 2014. The system was designed to ensure that preexisting eligibility determinations would not be changed when the new assessment was implemented.

Feedback from the beta test included observations relating to the increased length of the new comprehensive assessment, and concerns about the iterative process by which topics included in both the core and the triggered instruments are addressed. Beta test participants were assessed using both the foregoing instrument and the new comprehensive system, which some individuals found burdensome. The beta test also allowed the state to respond to technical problems with access, instrument navigation, and data entry, among other issues, prior to statewide implementation.

Washington

An external audit of Washington's personal care services program in the late 1990s found $88 million in disallowed services, leading to recommendations by long-term care experts and a joint legislative task force to develop a system that would be objective and consistent. The instrument they developed, CARE, serves all populations age 3 and over and was adopted from Oregon's assessment tool with the addition of validated measures and question items. It is a computer-based instrument that responds dynamically to the information as it is entered by assessors. CARE is compatible with the MDS used in nursing homes. During the design phase, workgroups were created to design clinical classifications and associated algorithms and to carry out time studies. Implementation began in 2003 after 5 years of development work and involved a geographic rollout that spanned nearly two years. The implementation was engineered with the goal of maintaining the average number of service hours across the state.

Michigan

Michigan moved to the MDS-HC in the 1990s partly to reduce the lengthy assessment time imposed by a prior instrument used in state programs. Implementation was facilitated by their existing relationship with an information technology vendor, and the fact that their home care network had a limited number of entities that needed to be engaged. The state currently uses the interRAI HC (iHC). The iHC, implemented in 2007, is the third version of the MDS–HC. In using iHC, the state entered into a contract relationship with InterRAI that includes an agreement to share its data with the interRAI organization and to limit deletions and edits to less than 5% of items. An initiative currently underway in the state may lead to the development of a distinct uniform assessment process for individuals with developmental disabilities.

Pennsylvania

Pennsylvania's prior assessment instrument, the Comprehensive Options Assessment Form, was 90 pages and took several hours to administer. They separated this tool into two stages, the Level of Care Assessment (LOCA), which determines clinical eligibility and level of need, and the Care Management Instrument (CMI), a care planning tool used only for those determined to be eligible. While implementing the LOCA and CMI the state redistributed responsibility for eligibility determination, enrollment, and service provision to distinct entities to eliminate the concern that system-level factors were creating incentives for overestimating client needs. Both the LOCA and CMI are computer-based, and much of the content collected by the LOCA automatically populates the CMI. A separate instrument is used for individuals with intellectual and developmental disabilities.

Assessment Systems and Processes

Uses of comprehensive assessments

Assessment instruments are typically designed to collect personal information that will be used to achieve pre-specified goals, whether for eligibility determination, service plan development, ongoing care management, or other functions. In order to standardize our comparison of how states use their comprehensive assessments, we began by developing a definitional framework of assessment stages, shown in Table 3. See Appendix A for the methodology used to generate this table.

Table 3. Components of Comprehensive Assessment.	
Stage	Definition
Preliminary screen	Initial contact with applicant seeking to gain entry into an eligibility process or waiting list. Identifies who will go on to a more in-depth assessment.
Eligibility Determination	Determination that eligibility criteria for a specific program(s) are met. A needs assessment is typically accomplished as part of this stage in assessment. Results may also determine prioritization of care or position on program waiting lists.
Functional Eligibility	Often referred to as the "level of care determination." For HCBS 1915(c) waiver programs, establishes that nursing home level of care criteria are met.
Financial Eligibility	Establishes that financial criteria are met. Typically performed by the state Medicaid department.
Needs Determination	Identification of specific service needs. Typically accomplished as part of clinical eligibility determinations.
Care Planning	Development of a plan of service delivery that takes into account an individual's needs and goals of care, existing sources of care and support, and resources available through a range of formal programs and informal supports.
Service Authorization	Establishing a budget or allocating service hours. May be generated by algorithms that rely upon information gathered during needs assessment or through the development of the care plan, or may be accomplished through a separate process.
Service Coordination, Case Management	Determination that services prescribed by the care plan match identified needs and services delivered, and that service delivery is timely.
Quality Monitoring	Quality monitoring may include reviews of completed assessments or aggregated data, as well as practices that ensure that data collection is consistent across assessors.
Reassessment	Repeated assessments accomplish one or more functions: (1) To verify continued eligibility (functional and/or financial), (2) To verify effectiveness of the care plan, and (3) To assess changing needs. Reassessments are typically conducted quarterly to annually or when there is a change in status.

All states describe a similar sequence of assessment stages, and use terminology that parallels the components we describe in Table 3. Table 4 populates Table 3 to indicate which of these functions are performed by the comprehensive assessment instrument used in each state.

Table 4. Assessment Components Performed by Comprehensive Instruments.				
Stage	**Michigan**	**New York**	**Pennsylvania**	**Washington**
	LOCD and iHC	UAS-NY: CHA, Functional and Mental Health Supplements, Others	LOCA and CMI	CARE
Preliminary screen	interRAI Telephone screen	NA	NA	CARE
Eligibility Determination	LOCD	UAS-NY	LOCA	
Clinical Eligibility				CARE
Financial Eligibility	Data unavailable	Data unavailable	Data unavailable	
Needs Determination	iHC	UAS-NY	LOCA	CARE
Care Planning	Using data from the iHC	Using data from the UAS-NY	CMI	CARE
Service Authorization	Using data from the iHC	Using data from the UAS-NY	LOCA and CMI	CARE
Service Coordination, Case Management	Follow-up of data from the iHC	Follow-up of data from the UAS-NY	Follow-up of data from the CMI	CARE
Quality Monitoring	QI measures built into the iHC.	QI measures built into the interRAI CHA and supplements.	Regular review of LOCA and CMI.	CARE
Reassessment	Every 3-6 months or with any change in status.	Every 6 months or with any change in status.	Annually or as needed	Annually or as needed

Within the states we studied, most comprehensive assessment instruments are used for clinical eligibility determination, including establishing whether criteria for NF LOC are met. A summary of how each state defines NF LOC is included in Appendix C. States vary on the use of the instrument for care planning. The two states that have interRAI-based instruments, Michigan and New York, use the assessment results as the foundation for the care planning process. Pennsylvania's initial LOCA is a more limited assessment that focuses on establishing NF LOC. A separate assessment used for care planning is needed as a result. Washington's CARE has modules that serve all assessment functions.

Most states apply their comprehensive assessment tool to HCBS programs that serve older adults and individuals with physical disabilities, reserving a separate set of processes and programs for children and individuals with developmental disabilities. Only Washington uses its instrument for all populations (excluding children younger than 3 years of age), although scales without youth-specific norms are not used for children, and a supplement is used for individuals with developmental disabilities.

Assessment processes and personnel

State and agency representatives were asked to describe how applicants move through the enrollment, assessment, and care planning steps linked to their comprehensive assessment system. Assessor qualifications were addressed as part of these discussions. Because New York's assessment system is still being developed and tested we have limited data on processes in that state. See Appendix D for diagrams of Michigan, Pennsylvania, and Washington's assessment processes.

Michigan

A network of providers, including 14 Area Agencies on Aging (AAAs), 3 community mental health boards, and 1 for-profit entity, are the waiver agents responsible for providing administrative services for the MI Choice waiver. Individuals or their proxies contact waiver agents as a first step in the enrollment process and undergo a phone screen. The screening tool uses items from the iHC to identify individuals likely to be eligible for waiver services and serves as the entry point for the MI Choice waiting list.

When an applicant's turn on the waiting list arises, the Level of Care Determination (LOCD) is administered to determine clinical eligibility and to triage to state plan, waiver, or nursing home services. The LOCD is completed in person by a health care professional or by staff with direct oversight by a health care professional in office or clinical settings. Financial eligibility is assessed by the Michigan Department of Human Services.

Once clinical and financial eligibility have been established, the iHC is completed by the waiver agent to collect information on client needs and to confirm that waiver services rather than State Plan Option services are appropriate. The iHC assessment is performed in the applicant's home by a team that consists of a

registered nurse and a social worker at the minimum. Individual waiver agents have the option to add question items to the iHC to reflect local needs.

The information gathered in the iHC is used by the waiver agent and the client to build a service delivery care plan through a person-centered process. The iHC includes algorithms that are triggered when certain needs are identified which provides guidance for service planning. Service hours are estimated as part of the care planning process. If needs are identified that cannot be met this is indicated in the care plan.

Pennsylvania

There are 52 Area Agencies on Aging who act as a Single Entry Point for all individuals in need of LTSS. AAA staff administers the LOCA to establish clinical eligibility. A local branch of the state Medicaid office conducts the financial eligibility determination.

Once NF LOC is documented using the LOCA, assessment stages follow one of two pathways based upon client age. For those under age 60, applicants are referred to a private enrollment broker who determines general service needs through a screening process. The enrollment broker selects the appropriate waiver program and provides referrals to the corresponding service coordination entity. The CMI is completed by the service coordination entity to identify which needs are being met completely, partially, or not at all, and to locate informal and formal services to address the service plan.

For individuals aged 60 or greater, the AAA performs all functions including care planning and service coordination, after which clients are referred to appropriate community-based direct service providers.

Assessors within each AAA are bachelor-level social workers trained in aging issues, pharmaceuticals, cognitive functioning, and survey methods who conduct in-home assessments using the LOCA for both age groups.

Washington

A Single Point of Entry system is organized around home and community service (HCS) offices where initial intake is conducted for all adults. The Division of

Development Disabilities (DDD) has separate offices that serve as the entry point for children and individuals with development disabilities.

Information collected through the CARE assessment determines financial and functional eligibility and is used for care planning. Automated algorithms generate benefit level estimates and create job tools for caregivers. These algorithms group individuals into 17 classification levels by shared clinical characteristics, and benefit level is assigned using data from time studies that were conducted during the instrument's design. AAAs are contracted to provide service coordination and delivery for adults of all ages receiving in-home services. A centralized body named the Exception to the Rule committee provides a mechanism to allow assessors the flexibility to adjust hours up as needed, and also is a forum for clients to request more hours.

CARE is administered in the home by care managers who have an undergraduate degree in a related field or significant experience in human services. Training consists of classroom didactics, on-the-job shadowing, and a 50-100% review of all assessments conducted in the first 6 months.

New York

The UAS-NY has been designed to guide program eligibility determinations, to evaluate health and functional status, to identify care needs and form the basis of a service plan, and to facilitate care coordination and service delivery. There is currently no Single Entry Point or No Wrong Door design for initial contact, although the state is considering developing this type of approach.

The first stage of assessment is conducted using the interRAI Community Health Assessment (CHA), which gathers the core data set. Functional and mental health supplements to the CHA are triggered as needed based on data collected in the first stage. The functional supplement is administered for individuals who are identified by the CHA as having an area of functional dependence. Additional state-specific instruments add program-related question items, for example, to collect information on recreational interests for ADHC program participants.

The system has not been designed to perform automated determination of service hours, but like other interRAI instruments it has clinical assessment triggers and algorithms for generating utilization intensity categorizations.

Because of significant geographic variation among counties in the resources available for HCBS, service hour determinations will be performed by counties.

New York is currently undergoing a transition to managed LTSS and has designed its assessment system with these changes in mind. Under this system existing LTSS clients will undergo assessment and service plan development by local districts, after which files will be transferred to managed care plans which will be obligated to maintain the service plan for 60 days. New LTSS enrollees will be assessed by the plans using the UAS-NY.

UAS-NY assessment may be performed by a single RN or by a social worker-RN team. Trainings for the pilot and early implementation phases have been solely web-based, an approach that is efficient and cost-saving, but has been found in early reviews to be unpopular.

Reassessment methods, purposes, and frequency

Reports from state representatives indicate that they are fairly uniform in their reassessment practices. Most states schedule assessment in order to verify continued functional and financial eligibility, to ensure the effectiveness of the care plan, and to assess changing client needs. A change in enrollee status or needs also triggers reassessment.

In Michigan, reassessment is conducted by one member of the initial assessment team and reviewed by the other. Reassessment intervals increase from 3 to 6 months once an individual's needs stabilize. For Pennsylvania's Aging Waiver program, reassessments using the LOCA take place annually or as needed and are performed by case managers within AAAs. AAA care managers also conduct reassessments in Washington annually or as triggered by status changes. While we do not have information about reassessment strategies in New York, publically available materials indicate that reassessments using the UAS-NY will occur every 6 months or as needed.

Use of instruments to support quality assurance practices

All states rely on their comprehensive assessments to support quality assurance tasks.

Michigan conducts an annual quality assurance check of each waiver agency using a random sample review of completed assessments and active care plans along with home visits. A minimum of 10 cases are reviewed per agency per year. They use quality indicators built into the iHC to evaluate local and statewide performance patterns in areas such as prevalence of inadequate meals, weight loss, dehydration, and failure to improve. Because the iHC has many items in common with the MDS 2.0, the instrument historically facilitated comparisons of client characteristics and service provision across settings of care.

Registered nurse consultants within each of Pennsylvania's AAAs review completed assessments. In cases of increased medical complexity assessments may be conducted by an RN and/or undergo additional physician review. The state Office of Long Term Living reviews 100% of new service plans to authorize hours assigned. Further, each AAA is reviewed annually with additional scrutiny applied to sites that are outliers on the basis of client complexity and hours assigned.

Statewide metrics drawn from Pennsylvania's LOCA are examined quarterly. The state uses SAMS Case Management software (Social Assistance Management System, Harmony Information Systems, Inc.) to provide statewide quality comparisons using benchmark tools.

Washington conducts yearly reviews of its home and community services by examining a statistically validated sample of CARE assessments, case files, and individual providers using a uniform quality assurance tool.

New York's evaluation and quality assurance practices are still being developed. Publicly available reports indicate that they plan to use the interRAI's built-in quality metrics and ability to generate aggregate and ad hoc reports.

Data sharing

All of the assessment tools we analyzed are computerized, and are either web-based or housed in a data sharing infrastructure that allows for system-wide data analysis. These capabilities are highly valued by states that use aggregate data for quality monitoring, policy development, and program planning.

The UAS-NY is built into a statewide, HIPAA-compliant, web-based communication infrastructure originally designed for emergency preparedness and health surveillance functions. The network now houses the electronic assessment instrument and its associated applications and is the portal for sharing assessment data. The UAS-NY will be accessible by providers across settings of care, which may break down traditional barriers between clinical services and LTSS.

Pennsylvania's data sharing infrastructure relies on SAMS case management software, which tracks all case management activities, creates work tools, and is now being linked to Geographic Information Systems to develop emergency management plans.

Washington's CARE is computerized but not web-based. However, fraud investigation staff and child and adult protective services have access to electronic assessment files.

Legal challenges and other unintended consequences

Pennsylvania and Washington report having faced legal challenges associated with their assessment systems. Michigan did not report any ongoing legal challenges, and the UAS-NY has not yet been fully implemented.

Pennsylvania

Pennsylvania recently countered a lawsuit related to the timeliness of their care plan approval process. In their prior system an applicant's initial encounter date that signified official entry into the assessment process was not clearly defined. Once the assessment system was streamlined through use of an enrollment broker and start points were explicit it became clear that clients were not always being processed within the federally mandated timeline. The case was settled and appropriate changes have been made.

Other legal issues have surrounded the screening process used by the private enrollment broker and have not pertained directly to the LOCA.

Washington

The transition from a previous tool to the CARE system was designed to maintain the average number of service hours allocated across the state. Despite achieving this goal, the shuffling of service hours at the client level had a greater impact on clients and providers and necessitated a higher volume of administrative hearings than anticipated. The state changed its service hour allocation algorithms accordingly. They found that working with clients to forestall administrative hearings through outreach and education was often quite effective and could have been attempted more frequently.

As described above, an Exception to the Rule (ETR) committee was created at CARE headquarters. After CARE generates hour allocations, if a case manager feels that more hours are needed an ETR request is presented to the committee. The ETR process also has enabled the state to eliminate geographical variation in the allocation of service hours. Currently the ETR committee meets twice a week and hears approximately 100 requests from across the state per month. About 2-3% of their client population has qualified for an ETR.

Washington continues to face litigation surrounding their methodology for making adjustments in service hours for informal supports. Further, the state continues to defend the notion that CARE is designed to equitably allocate a limited set of resources which are unable to meet all identified needs. Similarly, a current lawsuit pertains to an across-the-board cut made to the base service hours for all classification levels that was required as part of the state's response to the economic downturn. This has raised a debate as to whether the state has the right to adjust hours in response to state budget cuts.

Summary Recommendations

Detailed recommendations from example states

Key informants interviewed for this memo offered a wide range of recommendations to states embarking on the development of a comprehensive assessment system. A review of these recommendations, external standards and example state instruments yields recommendations that provide guidance to

California and that align with the state's universal assessment legislation. These are listed below

System planning

Washington and New York implemented their comprehensive assessment instruments within the past decade. Both emphasize the importance of identifying the goals of the assessment system prior to selecting an instrument or defining process elements. This groundwork stage should include understanding how the assessment will be used by managed care plans - for example, whether plans will be required to use the instrument or will be allowed to develop their own tools.

> This recommendation is consistent with the California legislative mandate to consider issues related to the implementation of the instrument, including determining who will administer the assessment, how the assessment results will be used, roles and responsibilities of health plans, counties, and HCBS providers, and issues surrounding its use for care planning and quality monitoring. Prioritizing the functions of the instrument will be an important future step that must precede the selection of topics and items.

Both Washington and New York also recommend setting a firm budget and timeline for all phases of testing and implementing the project. Washington was able to complete the research and design phases in just over 5 years, an accomplishment they attribute to their extremely limited development budget and tight timeline.

> The legislation establishes a related project timeline and a demonstration project.

Instrument development

All states recommend constructing comprehensive assessment instruments using tested measures, both to ensure that data collected are accurate and to garner support for the instrument among stakeholders. Two of the states we selected are among the17 states that use interRAI assessments. The remaining two created significantly different assessment instruments. Nonetheless, the instruments are similar in the domains assessed.

Although the legislation does not address the content of the assessment, it does establish a demonstration activity that provides the opportunity to test item performance for meeting the goals of the demonstration and the universal assessment process. The legislative focus on person-centered care plans might also argue for testing approaches to assessing individuals' goals, a function that is currently performed by only one of the reviewed instruments.

Leaders from Pennsylvania also commented on the fact that data collection and quality assurance are facilitated by the use of computerized instruments that use drop-down menus or buckets and minimize opportunities for free text entry. Pennsylvania is currently modifying its comprehensive assessment instrument to eliminate free text fields.

This recommendation is consistent with the legislative requirement for the universal assessment to be able to automate and exchange data across HCBS providers.

Comprehensive instruments must also provide a balanced assessment of functional and medical information. Informants from Pennsylvania noted that a better blend of medical and functional data would provide the opportunity to understand the impact of medical conditions on function. Further, they report that their current instrument does not effectively distinguish advanced dementia from mild cognitive impairment, and recommend that instrument design reflect predetermined assessment goals by ensuring that data collected are adequate for its purposes. One recommended topic that is not included in any assessments, but may be worth considering at the interface of health and functional status, is health literacy.

This recommendation is consistent with the legislative emphasis on coordination of services and improvement in quality of care. The focus on meeting the needs of the individual while emphasizing a function-oriented approach also incorporates the legislative prioritization of person-centered principles. The legislation also states that that the workgroup should consider how the universal assessment process can assess the need for nursing facility care, as well as strategies to divert individuals away from

nursing facility care and toward home- and community-based solutions whenever feasible.

Data sharing

Representatives from Pennsylvania and New York advise that instruments should be designed so that assessment data are compatible with the MDS and any other data collected within nursing facilities. InterRAI is compatible with the historical MDS instrument, but the recently implemented MDS 3.0 includes some significant changes that deviate from InterRAI, including some patient self-reported items. Representatives note that data that are transferable across settings of care enable statewide comparisons of quality and utilization of nursing facilities, skilled services, and HCBS. States that have designed data sharing capabilities into their assessment system have found this to be highly valuable for program planning and policy development.

This recommendation is consistent with the legislative focus on the assessment process having the ability to automate and exchange data and information between HCBS providers. It is also relevant to the emphasis on oversight and quality monitoring as well as nursing facility diversion.

Extension of the instrument across populations

Most states have separate assessment processes and instruments for children and individuals with developmental disabilities. Although Washington's CARE applies its instrument to all populations age 3 and older, they include a supplement for developmental disability. Other states have found it important to maintain distinct leadership, stakeholder processes, and assessment personnel, and have found that the values guiding instrument development should be allowed to vary for children and those with developmental disabilities.

California legislative goals for the demonstration include coordinating access to necessary and appropriate behavioral health services, including mental health and substance use disorder services. Services directed to children are not specifically addressed in the current universal assessment language.

Stakeholder engagement

Washington worked closely with stakeholder groups during the earliest research and development stages of their assessment system. Stakeholders were invited to be a part of work groups and were provided with updates through regular meetings. Stakeholders were kept informed of discussions related to individual assessment items, but true debate at this level was minimal.

New York also involved stakeholders during pre-development meetings as part of the state's Medicaid redesign initiative. Informants report that the proposal to develop a comprehensive assessment system as part of the redesign arose out of these meetings. Stakeholders were not involved in instrument selection or the process of tailoring the interRAI CHA to the LTSS system in New York. They re-engaged stakeholder groups again at a high level around practical issues of system implementation.

> The legislation specifically calls for stakeholder engagement through the creation of workgroups to address issues surrounding the development of a uniform assessment process.

System implementation

Leaders from Washington and New York commented on the importance of designing a regional roll-out process instead of moving quickly to implement statewide. They advise beginning with a small pilot and then carefully assessing whether the assessment system is functioning as intended with respect to its technical stability, the impact on clients, and the interaction with agencies' and service providers' business practices.

> The California legislation includes plans for a demonstration. This could include testing to determine technical stability and impact on clients. In addition the demonstration could generate data to develop a cross-walk for needs determination.

Review of assessments and service allocation

Respondents advise using a statistically validated sampling method to select assessments and/or care plans for review in place of a simple random sample (which may not reflect the true population variability), or 100% percent review

(which is labor intensive and inefficient). Pennsylvania is working toward creating a mechanism for the care plan to generate an interim service plan that can be put into place immediately while centralized authorization is pending.

> The legislative language indicates that the development of a universal assessment should consider how new assessments would be used for oversight and quality monitoring. Auditing the reliability and validity of assessments is an important component of ensuring that quality measures themselves are valid.

Washington faces a unique set of challenges given that its instrument generates service hours via automated algorithms. This process has required a great deal of upfront study and ongoing adjustments. While they report that their assessment system functions well and that client advocates are satisfied with it overall, one informant from the state recommended that other states consider using a budget-based method of service allocation rather than assigning a specific number of hours. They speculate that a budgeting system would be more client-centric and would result in reduced litigation.

> The legislation intends for the universal assessment tool and process to facilitate the development of care plans based on individual needs of the consumer. The goals of the demonstration clearly focus on promoting a person- and family-centered system that provides timely access to appropriate, coordinated health care services and community resources to enable attaining or maintaining personal health goals.

Conclusions

Comprehensive assessment for home- and community-based personal care services is a powerful tool used by states to gather accurate information about individual needs and to inform care planning. By standardizing assessment across programs, states have found they are better able to equitably and consistently allocate limited resources. Housing instruments in networked infrastructures allows states to maximize system efficiency and marshal data resources to improve policy and programs. Careful planning must precede instrument development, however. In designing or choosing new assessment instruments, states must define the functions they want the instrument to perform. Guided by predetermined system objectives, states can ensure that resources are directed

to top priority areas by selecting assessment domains and topics that collect only the information needed to achieve its goals.

Each studied state provides examples of assessment system successes and limitations. Washington has achieved consistency and equitability by automating service hour allocations, but has faced legal challenges related to the underlying algorithms. The design and implementation of CARE were carefully planned and executed and can serve as a model for other states.

Pennsylvania retained portions of their original tool when they transitioned to the current assessment system. Although they avoided a cumbersome implementation, their instrument falls short of meeting certain data collection goals and would be more useful for policy analysis and development if it had greater interoperability between clinical settings.

Michigan and New York appreciate the built-in triggers and classification systems and prior data analytics of the interRAI. Although the full impact of the UAS-NY cannot be analyzed yet, their data-sharing infrastructure is advanced and promises opportunities to break down traditional care and data collection silos. New York also exemplifies the fact that even a large state with multiple complex and disjointed HCBS programs can move toward uniform and comprehensive assessment.

Michigan's longstanding experience with the interRAI and the relative simplicity of its HCBS programs may explain why informants from this state did not identify any major ongoing challenges or limitations associated with their assessment system.

Future work will investigate the HCBS programs and assessment systems currently in place in California, and will draw upon those analyses and the findings within this memorandum to generate concrete recommendations for this state as it begins to develop a statewide comprehensive assessment system.

Appendix A

Methodology for selecting example states

We began the process of selecting example states by identifying priority areas for study. Priority areas reflected the mandate created by Senate Bill 1036, a law passed in June, 2012 which provides for the creation of a universal assessment system and instrument for HCBS in the state. We also considered contextual factors specific to California, such as the state's size and demographics, the county-based orientation of HCBS service delivery, and the range of programs the assessment system will incorporate. These focus areas determined the selection criteria we used to develop our panel of example states.

After defining selection priorities, the project team identified potential candidate states that have implemented uniform assessment across their HCBS programs by reviewing published literature and other reports and by contacting experts in the field. The state selection criteria we applied, the candidate states considered, and the instruments we collected from the 4 states chosen are listed in Table 1.

Methodology for studying states' uniform assessment instruments

Study states were contacted directly in order to obtain up-to-date versions of their assessment instruments. Two instruments, Washington's CARE and Pennsylvania's CMI, are dynamic, electronic instruments that do not exist in paper form and cannot be shared outside of state computer networks. For these instruments we analyzed assessor manuals provided by the states.

To develop a framework for comparing assessment instruments we constructed a hierarchical table that organizes the content areas assessed by each instrument into domains and topics. This table was created through a multi-step process. First, we defined an initial set of general assessment domains and underlying, more specific topics by referencing existing gold-standard recommendations for the content of standardized assessments. We identified these recommendations by conducting a targeted search for guidelines created by recognized entities whose objective was to provide standards for assessment of individuals needing long term services and supports in home and community settings. This process yielded five assessment standards or guidelines. In this prior work a table was created that captured the assessment domains and topics endorsed by expert panels. Using this gold standard framework as a foundation, the four study states'

instruments were scrutinized to extract the domains and topics addressed by each. Each instrument contained assessment domains and/or topics beyond those endorsed by the external assessment standards framework. Where this occurred we added new domains or topics as needed, resulting in an expanded framework that included all assessment domains and topics either endorsed by one or more gold-standard recommendations or included by one or more study state instruments.

Assessment domains are depicted in Table 2 in rows as dark bars, and topic areas are listed in rows beneath them. Check marks indicate which instruments, organized as columns, assess on topics and domains. Asterisks indicate whether one or more gold-standard entities endorse a given assessment topic. Because all recommended topics were retained in this table but not all recommended topics were included by any state, some topics do not correspond to any state instruments.

It is important to note that while overarching assessment themes readily lent themselves to codification into a non-overlapping set of domains, classifying individual question items into a discrete array of topics was less straightforward. We strove to create a parsimonious set of topics that was comprehensive but not redundant. To this end, we drew upon expertise within the research team in clinical medicine and instrument development to refine our interpretation of each item's intent and contribution to a given instrument.

Creating a framework for understanding assessment processes

To understand the different functions accomplished by comprehensive assessment in each state we developed a framework that decomposes and defines stages in the assessment process. This framework arose from a series of discussions that drew upon expertise within the project team, and through an iterative process isolated a set of universal steps from screening to eligibility determination, care plan development, and ongoing service plan monitoring that applicants move through in order to receive services. The framework we defined was modified slightly based on the assessment stages presented in The Hilltop Institute's 2009 paper entitled "Comprehensive Assessments in Home and Community-Based Services."[8] As a last step we tested our framework against the information gathered in key informant interviews to ensure that the stages and

uses we defined were consistent with practices in use by states. The framework we developed is provided in Table 3.

Appendix B

Appendix B. Example State Medicaid Program Data and Home- and Community-Based Services Programs.				
Program (State Plan, Waiver*, State-Only Funded)**	**Description/Population Served**	**Number Served**	**Services Offered**	**Assessment**
Michigan [9, 10, 11]	Medicaid Enrollment (% of population): 2,124,018 (21%)		Medicaid HCBS Participants Per 1,000: 8.50	
Independent Living Services	A range of services are available to anyone who needs assistance maintaining capacity within their own home. Medicaid eligible, 1+ ADL.	59,000	Eating or feeding, bathing, toileting, grooming, dressing, transferring from one position to another, mobility in home, taking medication, meal prep, laundry, housework, shopping for essentials.	Limited functional assessment
MI Choice*	Provides Medicaid-covered services like those provided by nursing homes in clients' own home or another residential setting. Clients must meet financial criteria, be NF LOC, and 65+ or 18-64 with a disability.	11,000	Adult day health, homemaker, personal care, specialized medical equipment and supplies, fiscal intermediary, goods and services, chore, community living supports, counseling, environmental accessibility adaptations, home delivered meals, non-medical transportation, nursing facility transition, PERS, private duty nursing, residential services, training for aged individuals.	LOCD, iHC
New York [11, 12, 13]	Medicaid Enrollment (% of population): 2,303,775 (27%)		Medicaid HCBS Participants Per 1,000: 14.23	
Personal Care Services Program	Available through Medicaid, private payment, and some health insurers. Provides personal care services and case management for individuals with at least 1 ADL limitation. Consumer-directed option available. Requires medical professional to complete needs form.	64,000	Housekeeping, meal preparation, bathing, toileting, and grooming, case management, short-term skilled care.	UAS-NY
Long Term Home Health Care Program*	Coordinated plan of medical, nursing, and rehabilitative care provided at home to persons with disabilities who are medically eligible for placement in a nursing home. Offers patients an alternative to institutionalization.	24,000	All regular Medicaid services plus case management by RNs, home-delivered or congregate meals, housing improvements and moving assistance, respiratory therapy, medical social services, respite care, social day care, and social transportation.	UAS-NY
Managed Long Term Care	Provides health and long-term care services to adults with chronic illness or disabilities to better address their needs and to prevent or delay nursing home placement. 65+ (55+ for PACE), NF LOC, chronic illness or disability.	20,000	Services include nursing, physical therapy, occupational therapy, speech pathology, medical equipment and supplies, podiatry, dentistry, optometry, respiration therapy, transportation and social day care.	UAS-NY

Appendix B

Appendix B. Example State Medicaid Program Data and Home- and Community-Based Services Programs.				
Program (State Plan, Waiver*, State-Only Funded)**	**Description/Population Served**	**Number Served**	**Services Offered**	**Assessment**
Adult Day Health Care	Medically-supervised services for individuals with physical or mental impairment. All ages, physical or mental impairment.	13,000	Nursing, transportation, leisure activities, physical therapy, speech pathology, nutrition assessment, occupational therapy, medical social services, psychosocial assessment, rehabilitation and socialization, nursing evaluation and treatment, coordination of referrals for outpatient health, and dental services.	UAS-NY
Assisted Living Program	Serves persons who are medically eligible for nursing home placement in a less medically intensive, lower cost setting. NF LOC, must not require continual nursing care.	2,000	Personal care, room, board, housekeeping, supervision, home health aides, personal emergency response services, nursing, physical therapy, occupational therapy, speech therapy, medical supplies and equipment, adult day health care, a range of home health services, and the case management services of a registered professional nurse.	UAS-NY
Traumatic Brain Injury*	18+, TBI or related condition, NF LOC, Medicaid-eligible, between 18 and 64 years of age, and injured after the age of 18.	2,000	Service coordination, assistive technology, community integration counseling, community transition support, environmental modification, home and community support, independent living skills and training, positive behavioral interventions and support, respite, structured day program, substance abuse program, transportation.	UAS-NY
Nursing Home Transition and Diversion Waiver*	Provides supports and services to assist individuals with disabilities and seniors toward successful inclusion in the community. Participants may come from a nursing facility or other institution (transition), or choose to participate in the waiver to prevent institutionalization (diversion). 65+ or physically disabled age 0-64, NF LOC.	160	Respite, service coordination, assistive technology, community integration counseling, community transitional services, congregate and home delivered meals, environmental mods, home and community support services, home visits by medical personnel, independent living skills training, moving assistance services, nutritional counseling/education services, peer mentoring, positive and behavioral interventions and supports, respiratory therapy, structured day program, wellness counseling.	UAS-NY

Appendix B

Appendix B. Example State Medicaid Program Data and Home- and Community-Based Services Programs.				
Program (State Plan, Waiver*, State-Only Funded)**	**Description/Population Served**	**Number Served**	**Services Offered**	**Assessment**
Pennsylvania [11, 14, 15]	Medicaid Enrollment (% of population): 1,159,333 (18%)		Medicaid HCBS Participants Per 1,000: 7.15	
Aging Waiver*	Largest expenditure program. Provides long term care services to qualified older Pennsylvanians living in their homes and communities. 60+, NF LOC.	29,000	Adult day centers, home health care, home support, personal care, respite, specialized medical equipment and supplies, financial management services (FMS), participant-directed community supports, participant-directed goods and services, community transition, companion, counseling, environmental modifications, home delivered meals, personal assistance, personal emergency response system (PERS), teleCare, transportation.	LOCA, CMI
OPTIONS**	Provides services to help clients remain in home or community settings. Consumer preferences are considered. OPTIONS services are targeted to those ineligible for Medicaid and/or who do not meet NF LOC criteria.	25,000	Home health, personal care, home support, medical equipment/supplies and adaptive devices, respite care, counseling.	LOCA, CMI
Attendant Care Waiver/Act 150*	Second largest by enrollment, less expensive than Independence Waiver. For mentally-alert individuals with physical disabilities age18-59.	7,000	Personal assistance, supports coordination, FMS, participant-directed community supports, participant-directed goods and services, community transition, PERS.	LOCA, CMI
Family Caregiver Support Program	Provides services to reinforce the care being given to persons over the age of 60 or adults with chronic dementia. Recipient must meet financial criteria.	7,000	Qualified primary caregivers may receive up to $500 per month in reimbursements for approved out-of-pocket expenses ranging from respite care to adult briefs	LOCA, CMI
Independence Waiver*	Home and community-based program to support independent living for individuals with physical disabilities. NF LOC, 3+ ADL limitations, financial eligibility.	5,000	Adult daily living services, accessibility adaptations, DME, community integration, community transition services, financial management services, home health, non-medical transportation, personal assistance services, PERS, respite, service coordination, supported employment, counseling.	LOCA, CMI

Appendix B

Appendix B. Example State Medicaid Program Data and Home- and Community-Based Services Programs.				
Program (State Plan, Waiver*, State-Only Funded)**	**Description/Population Served**	**Number Served**	**Services Offered**	**Assessment**
AIDS Waiver*	Provides home and community based services to eligible persons age 21 or older who have symptomatic HIV disease or AIDS.	800	Home health services, specialized medical equipment and supplies, nutritional consultation, personal assistance services.	NOT the LOCA
COMMCARE Waiver*	Home and community-based program for individuals who experience a medically determinable diagnosis of traumatic brain injury. 21+, financial eligibility, NF LOC.	729	Education, personal assistance, prevocational, respite, service coordination, supported employment, home health, FMS, accessibility adaptations/equipment/technology/medical supplies, adult daily living, community integration, community transition, non-medical transportation, PERS, residential habilitation, therapeutic counseling	LOCA, CMI
Washington [11, 16]	Medicaid Enrollment (% of population): 5,208,143 (17%)		Medicaid HCBS Participants Per 1,000:10.96	
Community Options Program Entry System (COPES)*	Provides services to avoid nursing facility placement. NF LOC, 65+, 18-64 for individuals with disabilities.	35,000	Home health aide, personal care, adult day care, caregiver/recipient training services, community transition, environmental accessibility adaptations, home delivered meals, managed care option-capitated, nurse delegation, personal emergency response, skilled nursing, specialized medical equipment and supplies, transportation	CARE
Medicaid Personal Care	A Medicaid program that is allowed under Washington State's Medicaid State Plan, this program provides assistance with activities of daily living to individuals who receive SSI or are approved for other CN medical programs.	26,000	Program participants are eligible to receive assistance with personal care services. This refers to human assistance with the activities of daily living such as bathing, eating, toileting, mobility, grooming and personal hygiene. Unlike many states, Washington Medicaid's Personal Care Program does not require individuals to live at home. Instead individuals that reside in adult residential communities, such as assisted living, can also receive personal care services.	CARE

Appendix B

Appendix B. Example State Medicaid Program Data and Home- and Community-Based Services Programs.				
Program (State Plan, Waiver*, State-Only Funded)**	**Description/Population Served**	**Number Served**	**Services Offered**	**Assessment**
New Freedom*	Medicaid-funded program that allows eligible participants to receive services in their home and community while managing their own service plan and budget. COPES and Medicaid Personal Care cover 95% of recipients of in-home assistance. 65+, 18-64 disabled	230	Personal assistance services, adult dental, environmental and vehicle modifications, individual-directed goods/services and supports, training and educational supports, treatment and health maintenance.	CARE

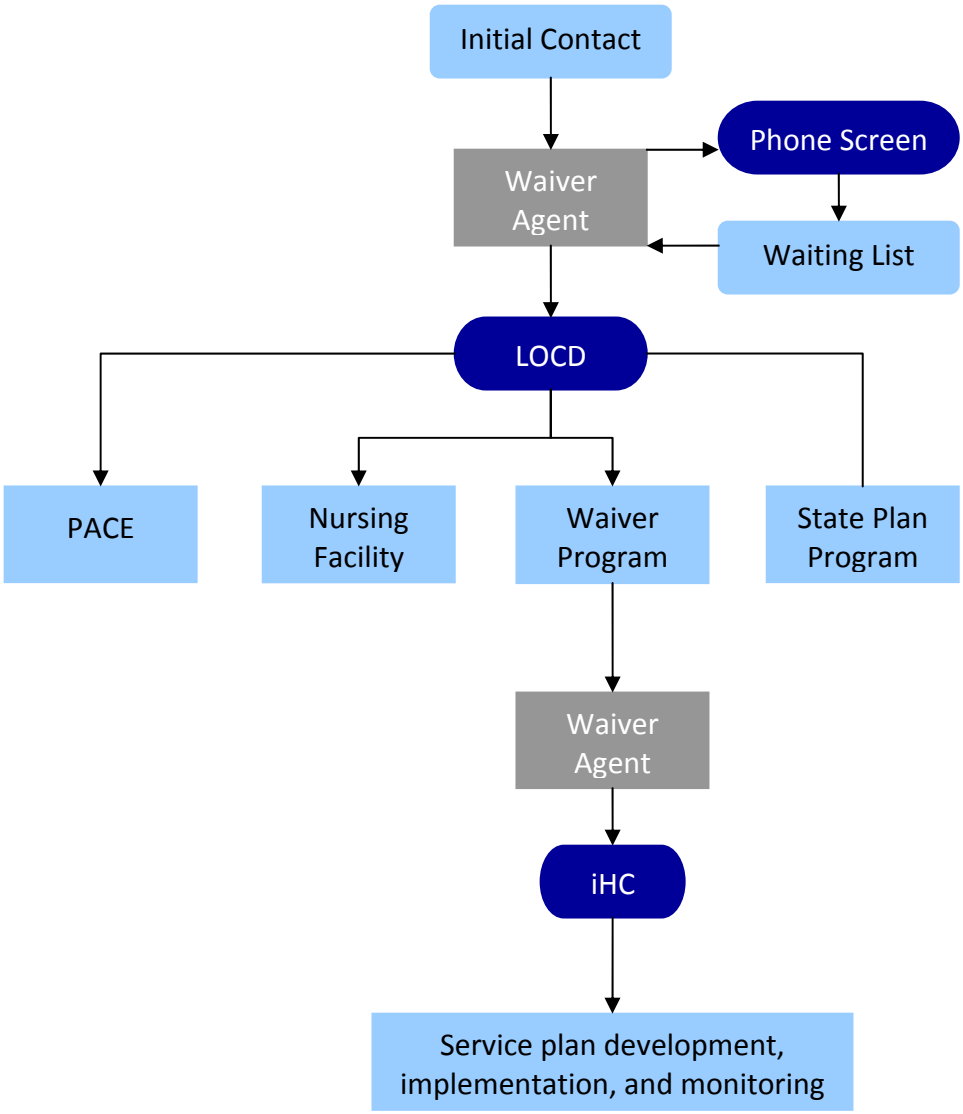
Appendix C

Appendix C. Nursing Facility Level of Care Criteria.	
State	**Criteria**
Michigan	Applicants meet the NF LOC standard through one (or more) of seven "doors." Door 1: Activities of Daily Living* Based on level of dependence for bed mobility, transfers, toilet use, and eating (mode and performance). Door 2: Cognitive Performance Short-term memory, cognitive skills for daily decision-making, and making self understood Door 3: Physician Involvement Physician visits and physician orders Door 4: Treatments and Conditions A. Stage 3-4 pressure sores B. Intravenous or parenteral feedings C. Intravenous medications D. End-stage care E. Daily tracheostomy care, daily respiratory care, daily suctioning F. Pneumonia within the last 14 days G. Daily oxygen therapy H. Daily insulin with two order changes in the last 14 days I. Peritoneal or hemodialysis Door 5: Skilled Rehabilitation Services Based on minutes of speech, occupational, or physical therapy provided over the past 7 days. Door 6: Behavior A. Wandering B. Verbally abusive C. Physically abusive D. Socially Inappropriate/Disruptive E. Resists Care Door 7: Service Dependency Individuals who have been enrolled in a Medicaid reimbursed nursing facility, the MI Choice Program, or PACE for one year or more and who remain service-dependent.
Pennsylvania	Based on a number of ADL limitations. Typically, limitations in 3 out of 6 areas confer eligibility, but in some cases IADL limitations must be present in conjunction to count. An individual with 5 out of 6 areas of ADL limitation qualifies without having additional IADL limitations.
Washington	Several ways to meet NF LOC criteria. The most basic is need for assistance with 3 ADLs. 2 ADL limitations is considered in the case of a high level of need. Cognitive function and frequency of skilled need is considered.
New York	NF-LOC Score derived from items in the interRAI HC that include cognitive and behavioral limitations, ADL performance, continence issues, and nutrition status.

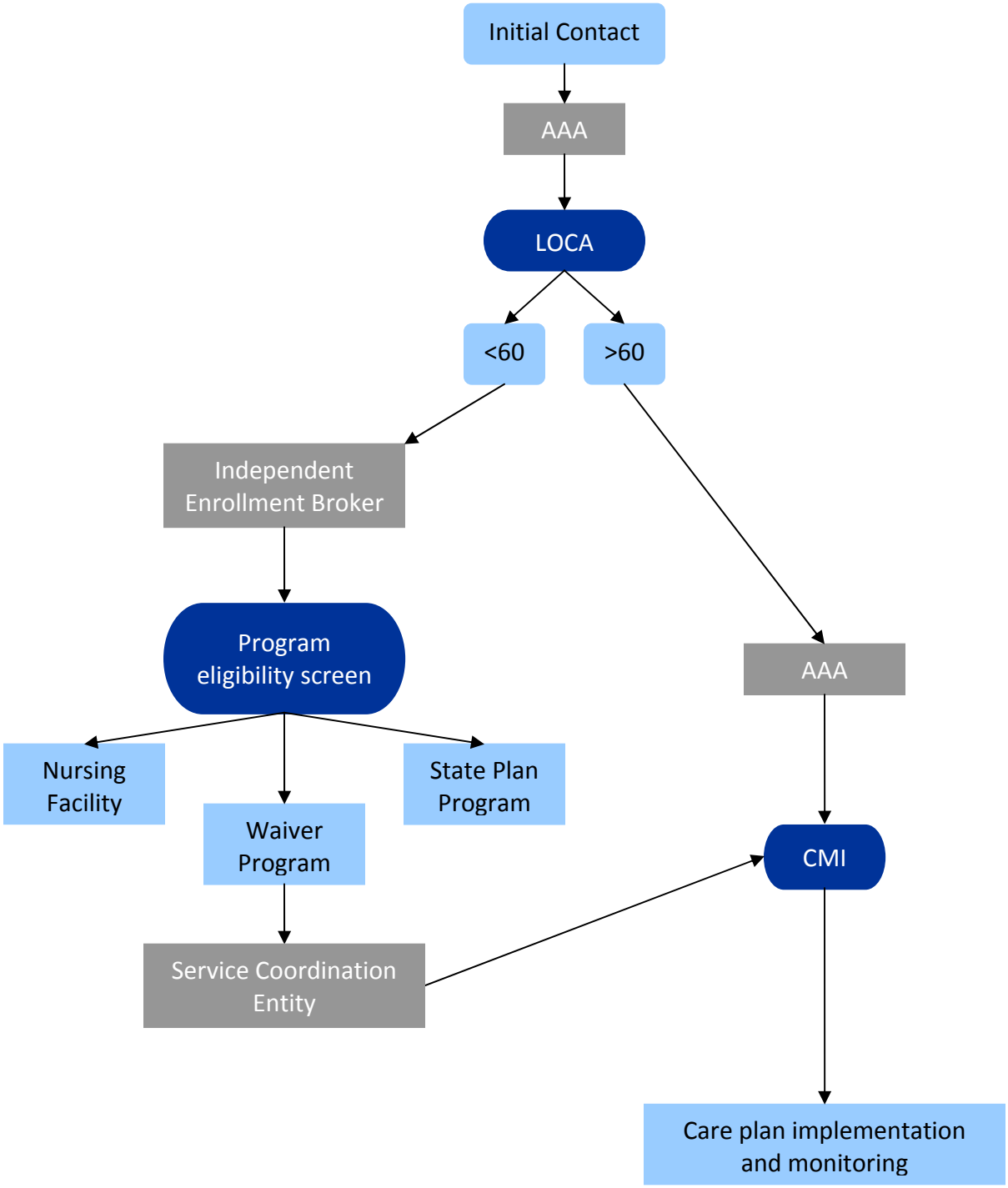
* Level of functional ability for these ADLs is weighted using a point system, and points are summed to create an ADL Index. Applicants must have an ADL Index of 6 or more to qualify under Door 1.

Appendix D

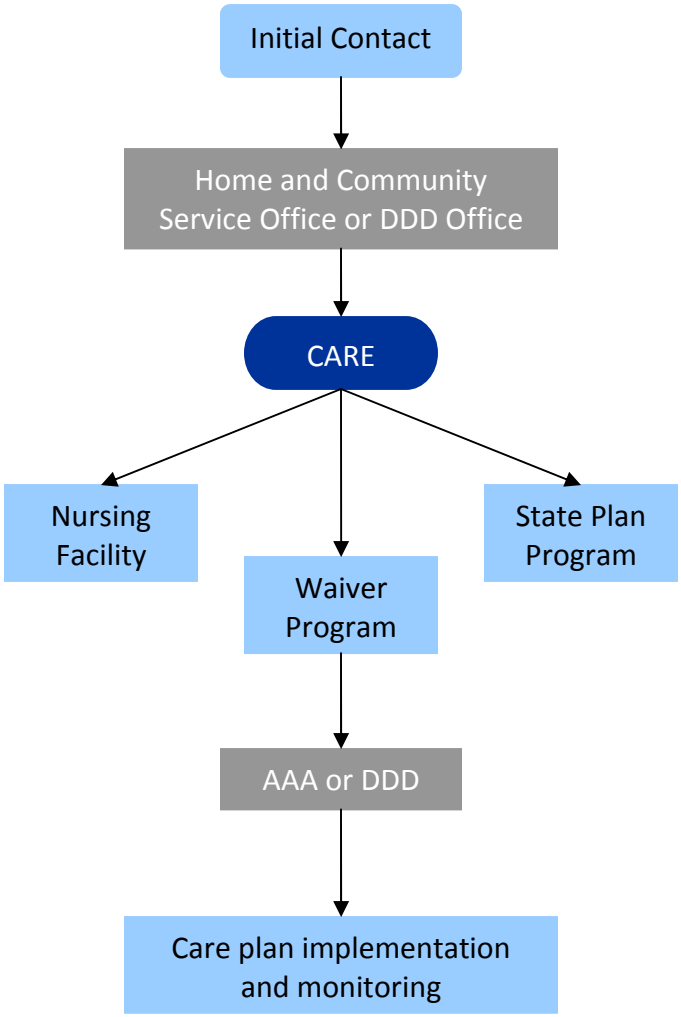
Michigan



Pennsylvania



Washington



References

[1] 2012 estimate from U.S. Census Bureau: State and County QuickFacts: http://quickfacts.census.gov/ accessed April 24, 2013

[2] Data from 2009 Medicaid Statistical Information System (MSIS) and Medicaid Financial Management Report: www.medicaid.gov accessed April 24, 2013

[3] Data obtained from the MI Choice waiver 2009 renewal application, accessed 05/01/2013 on the Michigan Department of Community Health webpage at: https://mail.mednet.ucla.edu/owa/redir.aspx?C=GdzvJ-rSVkad6YP9Iqmp6rfl8tmrHdBIV-pxDnXaeISwfWH3edGNy20jeJx2TM2_nXQDSdkasco.&URL=http%3a%2f%2fwww.michigan.gov%2fmdch%2f0%2c4612%2c7-132-2943_4857---%2c00.html

[4] Ng, T. & Harrington, C. (March 2013). Medicaid Home and Community-Based Services Data, 2009. Center for Personal Assistance Services, UCSF School of Nursing. Source: Analysis of CMS Form 372 waiver data and the authors' annual national survey of Medicaid state plan personal care services programs and home health programs. Accessed 05/01/2013 at: http://www.pascenter.org/state_based_stats/medicaid_hcbs.php?title=Medicaid%20HCBS%20Data&state=michigan.

[5] Pennsylvania's program enrollment figures were obtained through personal communication with a key informant from the Pennsylvania Department of Aging.

[6] Hokenstad, A., Shineman M., Auerbach R. (April 2009). An Overview of Medicaid Long Term Care Programs in New York. Medicaid Institute at United Hospital Fund. Accessed 05/01/2013 at: http://www.medicaidinstitute.org/assets/599

[7] Initial programs and plans that will be included in the UAS-NY: Adult Day Health Care, Assisted Living Program, HCBS Waiver – Care at Home I/II, Long Term Home Health Care Program, Managed Long Term Care and Programs for All Inclusive Care for the Elderly (PACE), Nursing Home Transition and Diversion, Personal Care Services and Consumer Directed Personal Assistance Program, Traumatic Brain Injury Waiver.

[8] Shirk, C. (2009, July). Comprehensive Assessments in Home and Community-Based Services. Baltimore, MD: The Hilltop Institute, UMBC.

[9] Information obtained from the Michigan Department of Community Health official website. Accessed 05/01/13 at: http://www.michigan.gov/mdch.

[10] Information obtained from the Michigan Department of Human Services official website. Accessed 05/01/13 at: http://www.michigan.gov/dhs.

[11] Information obtained from University of California, San Francisco's Center for Personal Assistance Services website. Accessed 05/01/13 at: http://www.pascenter.org/state_based_stats/index.php.

[12] Information obtained from the New York State Department of Health official website. Accessed 05/01/13 at http://www.health.ny.gov/health_care/medicaid/program/longterm/.

[13] Hokenstad A, Shineman M, & Auerbach R. (April 2009). *An Overview of Medicaid Long-Term Care Programs in New York*. Medicaid Institute at United Hospital Fund.

[14] Information obtained through personal communication with the Pennsylvania Department of Aging and the Pennsylvania Area Agencies on Aging.

[15] Information obtained from the Pennsylvania Department of Aging official website. Accessed 05/01/13 at: http://www.portal.state.pa.us/portal/server.pt/community/department_of_aging_home/18206.

[16] Information obtained from the Washington State Department of Social and Health Services official website. Accessed 05/01/13 at: http://www.dshs.wa.gov/.

[17] Saliba D et al. Memorandum on External Recommendations for Standardized Assessment in the United States. March 2013.