National Balancing Indicators Project
Final Summary Report

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Authors:

Jennifer Howard, M.P.P., M.S.W.
Ilene Harris Zuckerman, Pharm.D., Ph.D.
Cynthia Woodcock, M.B.A.*
Sue Flanagan, M.P.H., Ph.D.*
Oswaldo Urdapilleta, Ph.D.*
Judith L. Poey, Ph.D.*
Sarah Ruiz, Ph.D.*
Leanne Clark, Ph.D.*
Genevieve Waterman, M.S.*
Sarah Sabshon*
Artemis Mahvi, M.S.P.H.*

This report also includes work conducted by the National Balancing Indicator Contractor Team, which included staff from Abt Associates, Inc. and independent consultants.

* Formerly employed by IMPAQ International, LLC.

Submitted to:

Kerry Lida, Ph.D.
Division of Community Systems Transformation
Disabled & Elderly Health Programs Group
Center for Medicaid & CHIP Services
Centers for Medicare & Medicaid Services

***Submitted by*:**

IMPAQ International, LLC
10420 Little Patuxent Parkway
Suite 300
Columbia, MD 21044
www.impaqint.com

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Kane, Robert - University of Minnesota, School of Public Health
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Reinhard, Susan - AARP
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Some of the NBIs are taken or derived from existing surveys, evaluations, and other documents. Among these sources are the National Core Indicators, produced by the National Association of Directors of Developmental Disabilities Services, and Medicaid Long-term Care Expenditures, produced by Truven Health Analytics, formerly known as Thomson Reuters Healthcare and MEDSTAT.

This report includes work conducted by the National Balancing Indicator Contractor Team, which included staff from Abt Associates, HCBS Strategies and independent consultants.

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ACA	Patient Protection and Affordable Care Act
ACL	Administration on Community Living
AHRQ	Agency for Healthcare Research and Quality
BRFSS	Behavioral Risk Factor Surveillance System
CI	Community Integration and Inclusion
CLC	Cultural and Linguistic Competency
CMS	Centers for Medicare and Medicaid Services
CT	Coordination and Transparency
FMAP	Federal Medical Assistance Percentage
HCBS	Home and Community-based Services
DALTCP	Office of Disability, Aging and Long-term Care Policy
DSW	Direct Service Workforce
I&A	Information and Assistance
LTSS	Long-term Services and Supports
NBIs	National Balancing Indicators
NBIP	National Balancing Indicator Project
NCCC	National Center for Cultural Competency
OASPE	Office of the Assistant Secretary for Planning and Evaluation
NF	Nursing Facility
OC	Options Counseling
OCR	Office of Civil Rights
PCP	Person-centered Planning
SA	Shared Accountability
SAMHSA	Substance Abuse and Mental Health Administration
SD	Self-Determination
SPT	State Profile Tool
TEFT	Demonstration Grant for Testing Experience and Functioning Tools (TEFT) in Medicaid LTSS
TEP	Technical Expert Panel
THA	Truven Health Analytics
US DHHS	United States Department of Health and Human Service

EXECUTIVE SUMMARY

The purpose of the National Balancing Indicator Project (NBIP) is to refine and expand upon the national balancing indicators (NBIs) developed under the National Balancing Indicators Contract (NBIC) (2007–2010). The NBIs developed during the NBIC were the first step in creating a conceptual framework for developing a set of indicators, scores, and ratings that can be used by CMS and states to examine efforts in implementing balanced, person-driven LTSS.

This report outlines the final set of NBIs and describes the challenges, lessons learned, and recommendations for implementing them. The information included in the report can be used by CMS and other federal agencies as a guide in implementing the final set of NBIs, data collection requirements, data infrastructure development and other aspects of developing a system for assessing LTSS systems for the balance and person-centered nature consistent with CMS's vision.

Final Set of National Balancing Indicators

Of the 17 NBIs included in the final set of NBIs, only 8 are recommended for scoring. Another 7 indicators, S1. Global Budget, S5. Shared LTSS Mission/Vision Statement, SA1. Fiscal Responsibility, SA2. Personal Responsibility, SD1. Regulatory Requirements Inhibiting Consumer Control, CI1. Waiver Waitlist, and CI4. Transportation, are classified as developmental indicators requiring additional refinements and expansions and are not included in the final set of NBIs. Exhibit 1 summarizes these findings.

Exhibit 1: Final and Developmental National Balancing Indicators

Indicator	Inclusion in Final Set of NBIs (Final/Developmental)	Scored (Yes/No)
S1. Global Budget	*Developmental*	*No*
S2. LTSS Expenditures	Final	Yes
S3. Direct Service Workforce	Final	Yes
S4. Support for Informal Caregivers	Final	No
S5. Shared LTSS Mission/Vision Statement	*Developmental*	*No*
SD1. Regulatory Requirements Inhibiting Consumer Control	*Developmental*	*No*
SD2. Availability of and Use of Self-directed Services	Final	Yes
SD3. Risk Assessment and Mitigation	Final	No
SA1. Fiscal Responsibility	*Developmental*	*No*
SA2. Personal Responsibility	*Developmental*	*No*
SA3. Individual/Family Involvement in LTSS Policy Development	Final	No
SA4. Government, Provider and User Accountability	Final	Yes
CI1. Waiver Waitlist	*Developmental*	*No*
CI2. Housing	Final	Yes
CI3. Employment	Final	Yes
CI4. Transportation	*Developmental*	*No*
CT1. Streamlined Access	Final	Yes
CT2. Service Coordination	Final	Yes
CT3. LTSS Care Transition	Final	No

P1. Health Promotion and Prevention	Final	No
P2. Disaster/Emergency Preparedness	Final	No
CLC1. Needs Assessment and Target Population	Final	No
CLC2. Efforts to Design Services and Supports for CL Diverse Groups	Final	No
CLC3. Cultural and Linguistic Competency Training Requirements	Final	No

NBI Implementation Challenges and Lessons Learned

The NBIP team worked closely with the SPT Grantee states to obtain their support and determine the usefulness of the NBIs and the Technical Assistance Guide for NBIs in assisting them with completing the survey and providing the information and data necessary to generate the NBIs. The team worked to understand states' challenges in implementing the NBIs and completing the survey in an accurate and timely manner. The TEP also provided valuable information and insights regarding the implementation of the NBIs. Overall, states and TEP members pointed to numerous challenges in implementing the NBIs, leading to valuable lessons learned. Challenges in the implementation of the NBIs range from broad concerns regarding the scope of the indicators to more specific issues related to the sustainability of data collection under current conditions.

Conclusion

All of the principles and 17 indicators are included in the final set of NBIs, while another 7 are included as developmental indicators. In addition, 8 indicators have been recommended for scoring. The next step for CMS is to review the final NBIs, challenges and lessons learned related to NBI implementation and this report's recommendations for NBI implementation and determine the next steps. Prior to implementing the final set of NBIs, it is important that CMS consider the following concluding points and possible next steps:

- Except for the minimal face validity testing conducted through the receipt of feedback from the SPT Grantee States and LTSS Experts, the indicators were not evaluated based on validity or reliability. Validity and reliability testing are therefore recommended for the NBIs in the future.
- States should be encouraged to adopt the final indicators and utilize the Technical Assistance Guide (which includes the self-assessment survey tool) as a tool or process in which to collect the data necessary to implement the NBIs.
- To encourage state participation:
    - Make the implementation of the NBIs voluntary.
      OR
    - Work with partner federal agencies such as HUD and ACL to encourage use of the measures in grant programs or ACA initiatives (provided CMS can give the states funding), in which the scope of the NBI implementation may need to be a limited group of indicators for a particular grant/ACA program. Some possibilities are MFP, BIP, TEFT, Community First Choice, care management/coordination

programs (like Medicaid chronic health homes), and ACL grant programs for Aging and Disability Resource Centers (ADRCs).
OR
- Incorporate some of the measures as measures for the HCBS waiver assurances (in this case the measures would apply to a limited population—the waiver population).
OR
- Implement a new CMS demo with existing SPT states.

- Building an IT infrastructure is a difficult task for states, and CMS and other federal partners have the ability to assist measure implementation through other initiatives. For example, extending MFP infrastructure funding (beyond what the ACA authorized) would be an opportunity, as would other newly implemented demonstration projects such as TEFT. Another option would be building on the electronic assessment tools that states are being required to implement under certain programs (e.g., BIP, Community First Choice).
- For current CMS initiatives such as BIP, the measures could provide a broader look at state progress in rebalancing—current metrics for BIP center on institutional versus community spending. The NBIs may help some states whose expenditure measures do not meet CMS' expectations demonstrate other positive areas of balancing efforts.
- Quality indicators were not included in the NBIs to avoid duplicating efforts implemented by other CMS-funded projects (e.g., National Quality Enterprise). TEP members commented on the absence of quality indicators in the NBIs and thought that these needed to be included in any final set of NBIs developed. A recommendation might be to consider adding a select number of NBIs that address quality and include them and related questions in the state self-assessment survey instrument in the future.

CHAPTER 1. INTRODUCTION

The Centers for Medicare & Medicaid Services (CMS), along with other administrative agencies, organizations, and stakeholders, is tasked with ensuring that quality healthcare services are widely available to this country's most vulnerable citizens – those with chronic illness and/or disability across the lifespan. Today, many of these individuals require long-term services and supports (LTSS),[1] and they increasingly demand a LTSS system that offers an array of home and community-based services (HCBS) that is "responsive to consumer preferences" (Miller and Mor, 2006).

CMS awarded the National Balancing Indicator Project (NBIP) to IMPAQ International, LLC (IMPAQ) in 2010 to further refine and add to the 6 principles and 18 NBIs developed under the National Balancing Indicators Contract (NBIC) (2007- 2010). A first wave of refinements and expansions were made to the principles and NBIs under the NBIP between 2010 and 2012. In 2012, the principles and NBIs, along with the Technical Assistance Guide to NBIs (which included the state self-assessment survey instrument), were field tested with seven State Profile Tool (SPT) grantee states (AR, FL, ME, MA, MI, MN and KY). A second wave of refinements and additions were made to the principles, NBIs and Technical Assistance Guide to NBIs (including the state self-assessment survey instrument) from the latter part of 2012 through 2014. These refinements and additions were based on feedback received from the seven SPT grantee states, LTSS experts (e.g., the technical expert panel [TEP], stakeholder group members, federal partners and not-for-profit organizations). Under the NBIP, 7 Principles (1 new to the NBIC) and 24 NBIs (eleven new with some replacing previous indicators) were developed, refined and/or expanded.

The term "balancing" appears in the NBIP contract name and traditionally references Medicaid State agencies' efforts to more equitably distribute funding from institutional to community-based settings. The objective of the NBIP was to focus more broadly on the myriad components of a person-driven LTSS system that can provide full access to community alternatives. An ideal LTSS system must be responsive to the needs and desires of individuals, promote quality of life, and make use of person-centered planning and service delivery strategies. NBIP was tasked with addressing all of these issues.

The final principles, indicators and implementation recommendations to NBIs presented in this report reflect a 3-year effort. To date, several activities and reports have been completed under the NBIP, including the following:

- A comprehensive review of literature and data on existing LTSS indicators and indicators being developed under separate initiatives.

[1] Examples of LTSS include accessible and/or supervised housing, assistive devices, home modifications, personal care and assistance with activities of daily living (e.g., bathing, dressing, transferring) and instrumental activities of daily living (e.g., household chores, laundry, shopping and meal preparation) and psychosocial and emotional supports.

- A collaboration and communication strategy that included consultation with and feedback from SPT grantee states that participated in the field testing, LTSS experts (e.g., TEP and Stakeholder Group members) and federal partner agencies and other not-for-profit organizations (e.g., AARP) that were developing LTSS indicators under separate initiatives.
- A crosswalk of the NBIs to LTSS indicators being developed under separate initiatives and a summary of the findings in a report.
- Field testing of the principles, NBIs and state self-assessment survey instrument in 2012 with seven SPT Grantee States (AR, FL, ME, MA, MI, MN and KY) and review of the results along with feedback from the TEP and Stakeholder Group members.
- Three conference call meetings with the TEP and additional follow-up calls with select TEP members in the fall of 2013 to obtain feedback on the principles, indicators and survey instrument.
- Further refinement and expansion of the NBI principles, indicators and the Technical Assistance Guide for NBIs (including the state self-assessment survey instrument) based on TEP member feedback.
- The NBIP Measures Additions and Refinements Report.
- A one-page "Fact Sheet" for each Principle and related Principle Features and indicators.
- Evaluation of current indicators for inclusion in the final set of NBIs using three criteria based on indicator review criteria developed by National Quality Forum: 1) Importance, Relevancy and Potential to Encourage Systems Change, 2) Scientific Acceptability (Reliability and Validity), and 3) Usability and Feasibility.
- The NBIP Implementation Options Report.

The purpose of this Final Summary Report (hereafter referred to as the Report) is to provide CMS with the final set of NBIs, data infrastructure, and collection requirements necessary for states to develop and implement balanced and person-driven LTSS systems consistent with CMS's vision. The Report provides an overview of the final set NBIs. It describes the challenges and lessons learned related to implementing the Technical Assistance Guide to NBIs, specifically, the state self-assessment survey instrument used to collect the information necessary to implement the NBIs, and provides recommendations for promoting adoption and use of the indicators by states. Finally, the Report discusses conclusions and insight into applications of the NBIs.

The Report is organized as follows. ***Chapter 1*** provides an introduction to the concept of a balanced, person-driven LTSS system, the NBIC and NBIP and objectives, and the purpose and contents of this report. ***Chapter 2*** describes the National Balancing Indicator Project design. ***Chapter 3*** presents the final set of National Balancing Indicators by Principle. ***Chapter 4*** describes the challenges and lessons learned related to NBI implementation. ***Chapter 5***

presents an implementation methodology for the NBIs. ***Chapter 6*** presents the conclusions and next steps. The ***Appendix*** contains the final Technical Assistance Guide.

CHAPTER 2. DESCRIPTION OF PROJECT DESIGN

The NBIC developed a working vision for a balanced, person-driven long-term services and supports (LTSS) system. This vision provided the broader context for the rest of the work conducted under the NBIC and was vetted by CMS, the SPT Grantee States, the Technical Expert Panel, and other key stakeholders, including other government agencies.

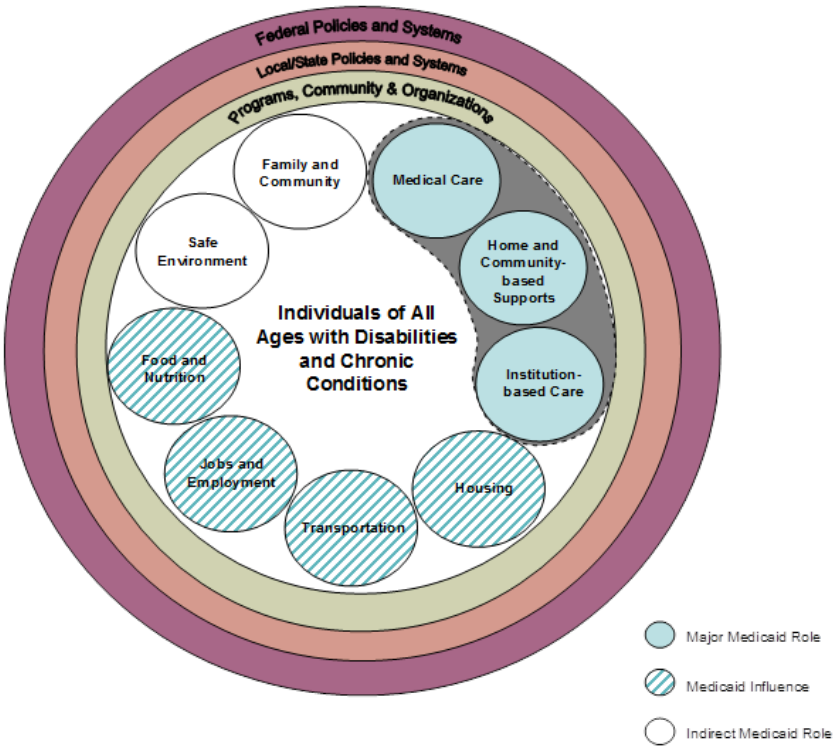
The vision developed pursuant to the NBIC is aligned with CMS's other efforts to develop a balanced, person-driven system. Examples of these efforts include the Real Choice Systems Change, New Freedom, Money Follows the Person (MFP), Balancing Incentive, and Direct Service Worker Resource Center Initiatives. The NBIC vision is stated as such:

> *A balanced, person-driven long-term services and supports system assures optimal physical and mental health, well-being, and functioning for people with disabilities and/or chronic conditions across their lifespan. High quality health and supportive services are provided in the most integrated setting, in a manner in which individuals have maximum choice and control.*

The LTSS system of the future will provide extensive and varied services and supports to individuals with disabilities through a diverse range of sectors, including medical care, formal and informal home and community-based supports, institution-based care, access to housing, transportation, employment, food and nutrition, a safe environment, and family and community. The features and the types of services and supports associated with these sectors are described in greater detail in the white paper entitled *A Vision of the LTC System of the Future* (2008) and the NBIC Literature-based Measure Report Draft Final (06/27/08).

Exhibit 2 presents all of the sectors of services and supports that comprise a balanced, person-driven LTSS system. The individual with disabilities who is the intended beneficiary of the supports described in Exhibit 2 is assured health and wellbeing through the provision of services and supports from *all* of the nine sectors displayed. The services and supports that are provided to the beneficiary are determined by three levels of influence, as represented in Exhibit 3 by the concentric circles surrounding the individual and the LTSS system sectors. These levels of influence are federal systems and policies, state/local systems and policies, and programs, community, and community organizations.

Exhibit 2: Service and Support Sectors of a Balanced, Person-Driven System of LT Services and Supports[2]



The NBIC team, composed of researchers from IMPAQ and Abt Associates, developed a set of six principles that form the foundation of the conceptual framework to measure the envisioned person-driven LTSS system. These principles underlie the provision of services and supports delivered by all entities in all sectors of the LTSS system (IMPAQ International & Abt Associates, 2011).

The NBIC team developed these principles after thoroughly reviewing concepts and frameworks from many sources including the Agency for Healthcare Research and Quality (AHRQ) Home and Community-Based Services Measures Scan and the CMS Quality Framework.[3] The team developed the principles iteratively, first by defining the features that one would expect to see within each principle and then refining them with input from CMS, stakeholders, and the Technical Expert Panel, and from indicators found in the literature (IMPAQ International and Abt Associates, 2011).

[2] IMPAQ International and Abt Associates (2011). National Balancing Indicators Final Report. Submitted to Centers for Medicare and Medicaid Services.

[3] HCBS Quality Framework (2002) Baltimore, MD: CMS (Updated in 2004). The framework was developed in part with the National Association of State Directors of Developmental Disabilities, State Units on Aging and State Medicaid Directors. See http://www.hcbs.org/moreinfo.php/doc/647.

The NBIC team developed the initial set of indicators by conducting a literature review, which consisted of a comprehensive measures scan of published and gray literature to document existing indicators of a balanced LTSS system and to determine the utility and feasibility of using these indicators. The team presented the results of the scan in two reports that it submitted to CMS: the NBIC Literature-Based Measures Report and the NBIC Technical Summary (IMPAQ International and Abt Associates, 2011).

The NBIC team identified a total of 575 existing indicators: 228 at the individual level and 347 at the system level. After extensive analysis and evaluation, the team concluded that 175 indicators across the six NBIC Principles met the evaluation thresholds set by the NBIC and recommended them for further consideration by CMS. After several iterations, the team selected the final 18 indicators. The evaluation thresholds that the team used to assess the existing indicators included criteria for relevance, feasibility, technical quality, susceptibility to influence, administrative usability, and population (IMPAQ International and Abt Associates, 2011).

The National Balancing principles and indicators developed under the NBIC needed further refinement and additions to address new data and information that was available, lessons learned during the field testing of the NBIs and the state self-assessment survey instrument, changes in the LTSS policy landscape, and feedback received from SPT Grantee States, the TEP and Stakeholder Group members, federal partner agencies, and other not-for-profit agencies. These refinements and additions occurred in two waves during the NBIP (2010 to 2012, and the latter part of 2012 to 2014).

The refinements and additions enhanced the existing principles, NBIs and the state self-assessment survey instrument. Enhancements included the addition of one principle, Cultural and Linguistic Competency, and nine new NBIs (SD3. Risk Assessment and Mitigation; SA1. Fiscal Responsibility; SA2. Personal Responsibility; SA3. Individuals and Families are Actively Involved in LTSS Policy Development; SA4. Government, Provider, and User Accountability; CI4. Transportation; P2. Disaster/Emergency Preparedness; CLC1. Needs Assessment and Target Population; CLC2. Efforts to Design Services and Supports for Culturally and Linguistically Diverse Groups; and, CLC3. Cultural and Linguistic Competency Training Requirements).

The methodology used by the NBIP team to further refine and add to the NBIs developed under the NBIC included the following activities:

- Reviewed relevant literature and data on existing LTSS indicators being developed under separate initiatives;
- Implemented a collaboration and communication strategy that included consultation with and feedback from SPT Grantee States that participated in the field testing, LTSS experts (e.g., the TEP and Stakeholder Group members), and federal partner agencies and other not-for-profit organizations (e.g., AARP) that were developing LTSS indicators under separate initiatives;

- Prepared a crosswalk of the NBIs to LTSS indicators being developed under separate initiatives and summarized the findings in a report;
- Conducted field testing of the principles, NBIs and state self-assessment survey instrument in 2012 with seven SPT Grantee States (AR, FL, ME, MA, MI, MN and KY), reviewed the results along with feedback from the TEP and Stakeholder Group members and incorporated feedback, as appropriate;
- Conducted three conference call meetings with the TEP and follow-up calls with select TEP members in the fall of 2013 to obtain feedback on the principles, NBIs and survey instrument;
- Further refined and expanded on the NBI principles, indicators and the Technical Assistance Guide for NBIs, which includes a self-assessment survey instrument based on TEP member feedback; and,
- Prepared the NBIP Measures Additions and Refinements Report.

The NBIP team's activities to refine, expand and select the final NBIs developed under the NBIC are discussed in more detail in the next sections.

2.1 Indicator Refinement and Expansion

As described in Chapter 1, the objective of the NBIP was to further develop, refine and expand upon the six Principles and 18 NBIs developed under the National Balancing Indicators Contract (NBIC). Seven Principles (one new) and 24 National Balancing Indicators (NBIs) (eleven new, with some replacing previous indicators) were developed, field tested, and further refined and/or expanded upon to during the project. The seven principles are (1) Sustainability, (2) Self-Determination/Person-centeredness, (3) Shared Accountability, (4) Community Integration and Inclusion, (5) Coordination and Transparency, (6) Prevention and (7) Cultural and Linguistic Competency. The indicators developed for each principle included system-level, individual-level and process and outcome-based indicators. The principles and NBIs developed, refined and expanded under NBIP are presented in Exhibit 3.

Exhibit 3: Principles and NBIs New, Refined and/or Added to Under the NBIP

Principle	Indicators
Sustainability	S1. Global Budget S2. LTSS Expenditures · S2a. Proportion of Medicaid HCBS Spending of the Total Medicaid LTC Spending · S2b. LTSS Spending Changes: Per Capita, Sources and Medicaid Eligibility · S2c. Medicaid Funding Sources · S2d. LTSS Funding From Non Medicaid Sources S3. Direct Service Workforce *(New)* · S3a. Direct Service Workforce (DSW) Registry · S3b. Direct Service Workforce: Volume, Compensation and Stability · S3c. Direct Service Workforce Competency · S3d. Direct Service Workforce Training S4. Support for Informal Caregivers S5. Shared Long-Term Supports and Services Mission/Vision Statement
Self-Determination/ Person-Centeredness	SD1. Regulatory Requirements Inhibiting Consumer Control · SD1a. Residential Setting · SD1b. Attendant Selection · SD1c. Nurse Delegation SD2. Availability of and Use of Self-direct Services SD3. Risk Assessment and Mitigation *(New)*
Shared Accountability	SA1. Fiscal Responsibility *(New)* SA2. Personal Responsibility *(New)* SA3. Individuals and Families are Actively Involved in LTSS Policy Development *(New)* SA4. Government, Provider and User Accountability *(New)*
Community Integration and Inclusion	CI1. Waiver Waitlist CI2. Housing · CI2a. Coordination of Housing and LTSS · CI2b. Availability and Access to Affordable and Accessible Housing Units *(Unchanged)* · CI2c. Housing Settings CI3. Employment · CI3a.Employment Rates of Working-Age Adults with Disabilities *(Unchanged)* · CI3b. Supported Employment Options CI4. Transportation *(New)* · CI4a. Availability and Coordination of Transportation CI4b. Users Reporting on Adequate Transportation and Unmet Needs *(Unchanged)*

Principle	Indicators
Coordination and Transparency	CT1. Streamlined Access · CT1a. Implementation · CT1b. Fully Functioning Criteria and Readiness Assessment *(Unchanged)* · CT1c. LTSS Partnerships CT2. Service Coordination · CT2a. LTSS System Coordination · CT2b. Users Reporting that Care Coordinators of Case Managers Help Them Get What They Need CT3. LTSS Care Transition
Prevention	P1. Health Promotion and Prevention P2. Disaster/Emergency Preparedness *(New)*
Cultural and Linguistic Competency *(New)*	CLC1. Needs Assessment and Target Population *(New)* CLC2. Efforts to Design Services and Supports for Culturally and Linguistically Diverse Groups *(New)* CLC3. Cultural and Linguistic Competency Training Requirements *(New)*

In order to develop, refine and expand the indicators, the NBIP team conducted research that included reviewing current literature and data available and holding numerous meetings with LTSS experts. The process for and outcome of these activities are described in more detail in the following sections.

Review of Current Literature and Available Data

Under the NBIP, the project team conducted a comprehensive review of current literature and data related to LTSS and the NBI principles and indicators in two waves, from 2011 to 2012 and from the latter part of 2012 to 2014, to document new indicators of a balanced system and additional information determining the utility and feasibility of current NBIs. The team's review of the literature was particularly instrumental in refining the Prevention and Shared Accountability Principles and developing the new Cultural and Linguistic Competency Principle. In addition, the review of the currently available data led to the expanded use of secondary data for several of the NBIs, including indicators examining LTSS expenditures and care coordination.

Review of NBIC Developmental Indicators

The NBIP team reviewed the developmental indicators that were deemed feasible to explore by the project team under NBIC as part of the first wave of NBI refinements and additions (2010 to 2012). The team reviewed these indicators to determine whether applicable literature and data supported their inclusion in the NBIs. For example, the team included Developmental Indicator 14, *Availability and Use of Transportation Services,* during the first wave of refinements and additions after the team determined that it could develop state self-assessment survey questions to collect appropriate and responsive data. Also in the first wave of refinements and

additions, the team declined to include developmental indicators that it determined to be infeasible either because there was a lack of information detailing how to implement the indicators or because data were not available.

Review of Results of 2010 and 2012 NBI Field Testing

The state self-assessment survey instrument served as the primary source of data for the majority of the LTSS indicators. To test the clarity of the state self-assessment instrument and, indirectly, the validity of the NBIs, the NBIP team undertook a data collection effort in 2010 and again in 2012.

The seven State Profile Tool (SPT) Grantee States (AR, FL, ME, MA, MI, MN and KY) selected to complete the state self-assessment survey instrument in 2012 were also part of the 2010 data collection and were awarded an additional grant by CMS to continue the refinement and expansion process. The data collection effort began in spring 2012 and concluded in late summer 2012. SPT Grantee States' efforts in and dedication to the data collection process were substantial. Several representatives from the SPT Grantee States completed the self-assessment tool, and SPT Grantee States provided responsive feedback on the questions and indicators, particularly during the refinement process. To ensure that SPT Grantee States were able to meet the demands of the revised timeline, the NBIP team provided intensive support to them by responding to their inquiries, sending reminders, hosting a webinar that provided information on how to use the self-assessment instrument, and participating in multiple SPT conference calls.

Results from the 2010 and 2012 NBI field testing of the self-assessment survey instrument were instrumental in making the refinements and additions during the two waves of this process.

Communication and Collaboration with LTSS Experts

Throughout the process of developing, refining and/or expanding the NBIs, the NBIP team sought and received feedback and valuable insights from Grantee States and LTSS experts (e.g., the TEP and Stakeholder Group members, federal partner agencies and selected not-for-profit organizations). The meetings and interactions with these entities are listed in Exhibit 4 below.

Exhibit 4: Summary of Meetings held with SPT Grantee States and LTSS Experts

SPT Grantee States	Technical Expert Panel	Stakeholder Group	Federal Partners
Ad Hoc Throughout Fall 2011, Spring 2012 and Summer 2012	April 2011 May 2011 June 2011 July 2011 September 2011 October 2013 (two meetings held)	June 2011 July 2011	February 2011 April 2011 June 2011 July 2011

Based on the feedback received from the SPT Grantee States and LTSS experts, the NBIP team iteratively developed, refined, and/or expanded the principles and indicators. The NBIP team's collaboration and communication strategy with each of these groups is discussed in more detail in the following section.

State Profile Tool (SPT) Grantee States

Ten SPT Grantee States (AR, FL, IA, KY, ME, MA, MI, MN, NV and VA) participated in field testing the principles, NBIs, and state self-assessment survey instrument during the NBIC in 2010. Seven Grantee States (AR, FL, ME, MA, MI, MN and KY) participated in field testing during the NBIP in 2012. The SPT Grantee States also provided additional consultation and feedback as requested by the NBIP team and CMS.

To develop the 2012 version of the principles, principle features, NBIs, and state self-assessment survey instrument under the NBIC, the NBIP team held regular meetings with the seven SPT Grantee States from January 2011 through March 2012. From April through July 2012, seven SPT Grantee States field tested the state self-assessment survey instrument that contained questions related to the principles, principle features, and NBIs that had been revised during the first wave of refinements and additions and provided feedback on their experiences. The NBIP team held monthly calls with the seven SPT Grantee States from fall 2011 through spring 2012 to provide the team with guidance on programmatic and data issues related to the feasibility of collecting the data required to implement the NBIs.

Technical Expert Panel (TEP)

CMS led the process of selecting new members for the TEP during the spring of 2011. Between July and September 2011, TEP members participated in regular conference calls with the NBIP team during which they provided input on the principles, principle features, NBIs, and the self-assessment survey instrument developed under the NBIC, and provided guidance on programmatic, policy, and data collection issues. The discussions with TEP members and the internal review conducted by the NBIP team validated many of the suggestions made by the SPT Grantee States and confirmed that those suggestions were methodologically sound and reflected current LTSS research.

In fall 2013, TEP members participated in a series of three meetings and seven follow-up calls, providing additional comments and guidance on the principles, principle features, NBIs, and the state self-assessment survey instrument. During these calls, the TEP members gave feedback on second wave refinements and additions, and offered advice on how each principle, principle feature, NBI, and the state self-assessment survey instrument could be strengthened and on programmatic, policy, and data collection issues. The NBIP team incorporated the TEP members' feedback into the enhanced principles, principle features, NBIs, and state self-assessment survey instrument that it submitted to CMS on February 28, 2014.

Stakeholder Group

The NBIP team selected members of the Stakeholder Group in consultation with CMS. The Stakeholder Group included representatives of consumer advocacy organizations, state agency program staff, state associations, and LTSS providers (e.g., institutional providers, community-based organizations, and medical, nursing, allied health, and paraprofessional organizations). These individuals provided comments and guidance during conference calls conducted in 2011. To ensure that the feedback that the NBIP team received from LTSS experts and SPT Grantee States and the research conducted by the NBIP team was current, members were asked to identify additional issues that might affect LTSS users. The NBIP team incorporated the feedback that it received from the Stakeholder Group into the additions and refinements that it made to the principles, principle features, NBIs, and state self-assessment instrument submitted to CMS on February 28, 2014.

Federal Partner Agencies

CMS selected federal partner agencies with which to exchange research agendas and LTSS indicators currently being developed. The NBIP team contacted 13 potential federal partner agencies (Appendix A). On October 13, 2011, the Director of Community Systems at CMS and the NBIP Project Director at IMPAQ sent invitation letters on CMS letterhead to these potential federal partner agencies inviting them to serve as federal partners for the NBIP.

CMS and the NBIP team conducted four meetings with the federal partner agencies in February, April, June, and August 2011. The first meeting served as an introductory meeting, while the remaining meetings focused on preparing the NBI Crosswalk Report. The meetings included discussions of findings and feedback, gaps in LTSS research, NBI refinements, direct service workforce, the expansion of the Shared Accountability Principle, and the addition of the Cultural and Linguistic Competency Principle. The information gleaned from these meetings informed the team's recommendations for NBI refinements and additions.

Prior to implementing the state self-assessment survey instrument, federal partner agencies from within and outside the U.S. Department of Health and Human Services (HHS) were invited to provide input on how their agencies might use the NBIs. As a result of the collaboration with these agencies, the NBIP team expanded several NBIs. The NBIP team also conversed with and received feedback from a number of not-for-profit organizations, including AARP and Benjamin Rose Institute, to gather information on their LTSS indicators.

2.2 NBI Evaluation

After completion of the indicator refinement and expansion activities, the NBIP Team evaluated each NBI by principle in order to make recommendations to CMS on the inclusion of indicators into the final set the NBIs. This review was conducted using the feedback received from the SPT Grantees and LTSS experts and using a set of three criteria based on

indicator review criteria developed from the National Quality Forum, a nationally recognized resource on measures of health care quality. The three criteria used included:

- Importance, Relevancy and Potential to Encourage Systems Change
- Scientific Acceptability
- Usability and Feasibility

Criterion 1, *Importance, Relevancy and Potential to Encourage Systems Change* evaluates whether an indicator addresses three elements: (1) a specific LTSS goal/priority per the vision of the LTSS future; (2) one of the following: (2.1) "high impact" aspects of LTSS (those aspects that are globally important to individuals, families and individuals using LTSS) or (2.2) new, previously unmeasured or under-measured data on LTSS; and (3) data that allowed for the detection of problems and/or specific areas for improvements over time, which is useful in informing states of changes that could be made to progress toward implementing an ideal LTSS system.

Criterion 2, *Scientific Acceptability* evaluates the technical aspects related to the construction and operationalization of the indicator. These criteria assess evidence of the indicator's reliability and validity. Indicators are expected to provide data that are: 1) appropriately specified and 2) pass standard assessments of scientific acceptability, such as reliability and validity.

In conventional usage, the term *validity* refers to the extent to which an empirical measure adequately reflects the *real meaning* of the concept under consideration (Babbie, 1992). Types of validity testing include *face validity* and *criterion-related* or *predictive validity. Face validity* is defined as the extent to which a test is subjectively viewed as covering the concept it purports to measure. It refers to the transparency or relevance of the measure. A measure can be said to have face validity if it *looks like* it is going to measure what it is supposed to measure. For the purpose of evaluating the NBIs, validity testing was not conducted. However, face validity testing, to some degree, was supported through feedback received from the SPT Grantee States and LTSS Experts.

Reliability is the overall consistency of a measure. A measure is said to have a high reliability if it produces similar results under consistent conditions (Hess, McNab & Basoglu 2014). Reliability testing was not conducted under the NBIP. There is concern that, even with detailed instructions, states may interpret the same question included in the state self-assessment survey instrument differently resulting in significant variation in reporting.

Criterion 3, *Usability and Feasibility*, evaluates an indicator's utility and practicality. This criterion examines the degree to which the indicators are publicly available and understandable to a range of audiences, the intervals at which data are collected, and the extent to which each indicator is available in a usable form. Ensuring that each indicator and the data it yields are accessible and regularly available is fundamental to the goals of the NBIs.

Usability examines the extent to which intended audiences (e.g., users, purchasers, policymakers) can understand the results of the indicator and find those results useful for decision making. Usability includes four elements that must be addressed by an indicator:

- The indicator performance results are available to the public at large
- The indicator results are considered meaningful, understandable, and useful to the intended audience(s) for informing the current state of LTSS systems and areas of improvement
- Data and result details are maintained such that the indicator can be deconstructed to facilitate transparency and understanding
- If disparities in services, satisfaction and/or care have been identified, indicator specifications, scoring, and analysis allow for identification and reporting of disparities through stratification of results (e.g., by race, ethnicity, socioeconomic status, gender), or the rationale/data justifies why the stratification is not necessary or feasible.

Feasibility examines the extent to which the required data are readily available or could be captured without undue burden and can be implemented for performance measurement. Feasibility includes the following three elements:

- Data are:
  - Collected as part of routine service delivery or service follow-up (e.g., routine satisfaction surveys), or
  - Regularly collected at defined intervals, or
  - Regularly available from administrative (e.g., program enrollment) or secondary data sources (e.g., Census data, BRFSS).
- Susceptibility to inaccuracies, errors, or unintended consequences related to measurement are judged to be inconsequential
- The data collection and measurement strategy can be implemented as demonstrated by operational use in external reporting programs, or testing did not identify barriers to operational use (e.g., barriers related to data availability, timing, frequency, sampling, fees for use of proprietary specifications).

Indicators were evaluated based on a high, moderate or low confidence that Evaluation Criteria 1 and 3 were met. Criterion 2 could not be evaluated since validity and reliability testing was not conducted. A “high” evaluation score meant that an indicator met all of the elements of an evaluation criterion. A “moderate” evaluation score meant that an indicator met more than one but less than all of the elements of a criteria. A “low” evaluation score meant that an indicator met one or none of the elements of an evaluation criterion.

2.3 Final Indicator Selection

The final step in selecting the final indicators was receiving input from CMS. The NBIP presented CMS with the recommended list of final indicators in the NBI Implementation Options Report based on the results from the indicator evaluation described above. The NBI Implementation Options Report recommended that 19 indicators be included in the final set of NBIs and 5 be dropped completely. However, the results of the indicator evaluation and the recommendations put forth in the NBI Implementation Options Report were not shared with the TEP or a wider audience for feedback as originally anticipated. Therefore, it was the final decision to have a final set of NBIs that included all of the principles and 17 of the indicators and include the 7 indicators not in the final set as developmental indicators to be utilized for specific purposes or further refined and expanded in the future. Further information related to the final and developmental indicators is described in Chapter 3 below.

CHAPTER 3. FINAL NATIONAL BALANCING INDICATORS BY PRINCIPLE

Chapter 3 outlines the final NBIs as well as the developmental indicators. The final indicators have gone through numerous iterations of refinements and additions, been vetted with LTSS experts, shown to have a moderate to high confidence score when evaluated using the indicator evaluation tool, and been approved by CMS for inclusion in the final set. The developmental indicators did not receive a moderate or high confidence rating when evaluated and were not approved by CMS for inclusion without further refinements and expansions and discussions with TEP members. Developmental indicators were identified as emerging areas that are important for better understanding the state of balancing across states, but only recommended for use as an additional or optional examination of a specific aspect of balancing. Exhibit 5 summarizes the final and developmental NBIs.

Exhibit 5: Final and Developmental National Balancing Indicators

Indicator	Inclusion in Final Set of NBIs (Final/Developmental)	Scored (Yes/No)
S1. Global Budget	*Developmental*	*No*
S2. LTSS Expenditures	Final	Yes
S3. Direct Service Workforce	Final	Yes
S4. Support for Informal Caregivers	Final	No
S5. Shared LTSS Mission/Vision Statement	*Developmental*	*No*
SD1. Regulatory Requirements Inhibiting Consumer Control	*Developmental*	*No*
SD2. Availability of and Use of Self-directed Services	Final	Yes
SD3. Risk Assessment and Mitigation	Final	No
SA1. Fiscal Responsibility	*Developmental*	*No*
SA2. Personal Responsibility	*Developmental*	*No*
SA3. Individual/Family Involvement in LTSS Policy Development	Final	No
SA4. Government, Provider and User Accountability	Final	Yes
CI1. Waiver Waitlist	*Developmental*	*No*
CI2. Housing	Final	Yes
CI3. Employment	Final	Yes
CI4. Transportation	*Developmental*	*No*
CT1. Streamlined Access	Final	Yes
CT2. Service Coordination	Final	Yes
CT3. LTSS Care Transition	Final	No
P1. Health Promotion and Prevention	Final	No
P2. Disaster/Emergency Preparedness	Final	No
CLC1. Needs Assessment and Target Population	Final	No
CLC2. Efforts to Design Services and Supports for CL Diverse Groups	Final	No
CLC3. Cultural and Linguistic Competency Training Requirements	Final	No

In addition to being included in the final set of NBIs, several indicators have been recommended for scoring. Scoring refers to a numerical assessment for an indicator that specifies how the state is doing in a particular area. A scoring methodology would need to be developed if CMS and states wish to score an indicator for the purposes of "ranking" states in

these areas. Currently, the final set of NBIs is intended to collect information to understand progress in balancing across states rather than to rank states' balancing efforts. Scoring and more detailed information related to the final NBIs and developmental indicators are presented below by Principle.

3.1 Sustainability

Three of the five indicators under the Sustainability Principle are included in the final set of NBIs. These include S2. LTSS Expenditures, S3. Direct Service Workforce, and S4. Support for Informal Caregivers. Scoring is recommended for two of the indicators (S2 and S3). Indicators S1. Global Budget and S5. Shared LTSS Mission/Vision Statement are included in the final set as developmental indicators. Exhibit 6 presents the final indicators included in the Sustainability Principle.

Exhibit 6: Final National Balancing Indicators - Sustainability

Indicator	Type of Indicator	Inclusion in Final Set of NBIs (final/developmental)	Score (Yes/No)
S1. Global Budget	*System Level/Process Indicator*	*Developmental*	*No*
S2. LTSS Expenditures	System Level/Outcome Indicator	Final	Yes
S3. Direct Service Workforce	System Level/ Process and Individual-level Outcome Indicator	Final	Yes
S4. Support for Informal Caregivers	System Level/Process and Individual-level Outcome Indicator	Final	No
S5. Shared LTSS Mission/Vision Statement	*System Level/ Process Indicator*	*Developmental*	*No*

3.2 Self-Determination

Two of the three indicators associated with the Self-Determination principle have been included in the final set of NBIs. Scoring is recommended for one indicator (SD2). Exhibit 7 presents the final indicators included in the Self Determination/Person-centered Principle.

Exhibit 7: Final National Balancing Indicators - Self-Determination

Indicator	Type of Indicator	Inclusion in Final Set of NBIs (final/developmental)	Score (Yes/No)
SD1. Regulatory Requirements Inhibiting Consumer Control	*System Level/Process Measure*	*Developmental*	*No*
SD2. Availability of and Use of Self-directed Services	System Level/Process Measure	Final	Yes
SD3. Risk Assessment and Mitigation	System Level/Process Measure	Final	No

3.3 Shared Accountability

Two of the four indicators under this principle are included in the final set of NBIs (SA3 and SA4). The other two NBIs, SA1. Fiscal Responsibility and SA2. Personal Responsibility, are included as developmental indicators, requiring additional refinements and additions prior to implementation. Scoring has been recommended for one of these indicators (SA4). Exhibit 8 presents the final indicators included in the Shared Accountability Principle.

Exhibit 8: Final National Balancing Indicators - Shared Accountability

Indicator	Type of Indicator	Inclusion in Final Set of NBIs (final/developmental)	Score (Yes/No)
SA1. Fiscal Responsibility	*System Level/Process Measure*	*Developmental*	*No*
SA2. Personal Responsibility	*System Level/Process Measure*	*Developmental*	*No*
SA3. Individual/Family Involvement in LTSS Policy Development	System Level/Process Measure	Final	No
SA4. Government, Provider and User Accountability	System Level/Process and Outcome Measure	Final	Yes

3.4 Community Integration

Two of the four indicators under the Community Inclusion and Integration Principle are included in the final set of NBIs and recommended for scoring (CI2 and CI3). Two indicators have been designated as developmental, CI1. Waiver Waitlist and CI4. Transportation, requiring

additional review and possible refinements and additions prior to implementation. Exhibit 9 presents the final indicators included in the Community Integration and Inclusion Principle.

Exhibit 9: Final National Balancing Indicators - Community Integration and Inclusion

Indicator	Type of Indicator	Inclusion in Final Set of NBIs (final/developmental)	Score (Yes/No)
CI1. Waiver Waitlist	*System Level/Process Measure*	*Developmental*	*No*
CI2. Housing	System Level/Process Measure	Final	Yes
CI3. Employment	System Level/Process and Outcome Measure	Final	Yes
CI4. Transportation	*System Level/Process and Individual-level Outcome Measure*	*Developmental*	*No*

3.5 Coordination and Transparency

All three indicators under the Coordination and Transparency Principle have been recommended for inclusion in the final set of NBIs, and two have been recommended for scoring (CT1 and CT2). Exhibit 10 presents the final indicators included in the Coordination and Transparency Principle.

Exhibit 10: Final National Balancing Indicators - Coordination and Transparency

Indicator	Type of Indicator	Inclusion in Final Set of NBIs (final/developmental)	Score (Yes/No)
CT1. Streamlined Access	System Level/Process Measure	Final	Yes
CT2. Service Coordination	System Level/Process Measure (CT2a) and Individual-Level/Outcome Measure (CT2b)	Final	Yes
CT3. LTSS Care Coordination	System Level/Process Measure	Final	No

3.6 Prevention

Both of the indicators under the Prevention Principle are included in the final set of NBIs, and neither is recommended for scoring. The information gathered should be used for informational purposes in an attempt to better understand how states might provide health promotion and preventative services as well as prepare for disasters and emergencies for

people with disabilities. Exhibit 11 presents the final indicators included in the Prevention Principle.

Exhibit 11: Final National Balancing Indicators - Prevention

Indicator	Type of Indicator	Inclusion in Final Set of NBIs (final/developmental)	Score (Yes/No)
P1. Health Promotion and Prevention	System Level/Process Measure	Final	No
P2. Disaster/Emergency Preparedness	System Level/Process Measure	Final	No

3.7 Cultural and Linguistic Competency

All three of the indicators under the new Cultural and Linguistic Competency Principle are included in the final set of NBIs, and none are recommended for scoring. The information gathered should be used for informational purposes in an attempt to better understand how states might provide culturally and linguistically competent LTSS through the provision of needs assessment and targeting and designing services for such populations. Exhibit 12 presents the final indicators included in the Cultural and Linguistic Competency principle.

Exhibit 12: Final National Balancing Indicators - Cultural and Linguistic Competency

Indicator	Type of Indicator	Inclusion in Final Set of NBIs (final/developmental)	Score (Yes/No)
CLC1. Needs Assessment and Target Population	System Level/Process Measure	Final	No
CLC2. Efforts to Design Services and Supports for CL Diverse Groups	System Level/Process Measure	Final	No
CLC3. Cultural and Linguistic Competency Training Requirements	System Level/Process Measure	Final	No

CHAPTER 4. NBI IMPLEMENTATION CHALLENGES AND LESSONS LEARNED

The NBIP team worked closely with the SPT Grantee states to obtain their support and determine the usefulness of the NBIs and the Technical Assistance Guide for NBIs in assisting them in completing the survey and providing the information and data necessary to generate the NBIs. The team worked to understand states' challenges in completing the survey and providing information in an accurate, complete, and timely manner. The TEP provided valuable information and insights regarding the state self-assessment instrument and questions it asked to collect the information and data necessary to generate the NBIs. The intent of Chapter 4 is to state the challenges identified and lessons learned that may make the data implementation and collection of NBI implementation more effective and efficient.

4.1 Challenges

During the development and field testing of the indicators, a number of challenges were identified related to their implementation. These challenges are discussed in detail below.

Scope of the NBIs and Survey

The term "balancing" appears in the NBIP contract name and traditionally references Medicaid state agencies' efforts to more equitably distribute funding from institutional to community-based settings. However, the objective of the NBIP was intended to focus more broadly on the myriad components of a balanced and person-driven LTSS system that can provide full access to community alternatives. An "ideal" LTSS system must be responsive to the needs and desires of individuals, promote qualities of life, and make use of person-centered planning and service delivery strategies. The NBIP team was tasked with developing NBIs that addressed all of these issues and a state self-assessment survey instrument that collects and organizes the information necessary to implement the NBIs.

In order to address all of the issues included in the NBIs, the state self-assessment survey instrument is long and complex, requires multiple respondents from multiple state agencies and takes a significant amount of time to complete and verify. These findings were confirmed by the 10 SPT Grantee States that field tested the state self-assessment survey instrument under the NBIC and the 7 SPT Grantee States that field tested the instrument under the NBIP.

Cross-Agency Collaboration

Implementing the NBIs will require a substantial amount of cross-agency collaboration at the federal and state levels. Some indicators, notably the measures of nurse delegation, housing transportation, and coordination between HCBS and institutional entities will require that multiple agencies collaborate and design systems in tandem to report data in an accurate and timely manner. All of the STP Grantee States reported that obtaining cross-agency collaboration was one of the major challenges. They reported significant obstacles in obtaining data from

other agencies and had difficulty working collaboratively on a shared project. Also, the TEP members questioned whether states could maintain the cross-agency collaboration necessary to obtain and report data in an accurate and timely manner. Regarding indicator CI2. *Housing,* one TEP member commented:

> *States will have to go through their housing authorities to gather this information that are multiple in many states. In some states they are not coordinated with each other and some states have a state authority that has some coordination and oversight responsibility. Medicaid staff is not going to know how to answer these questions.*

Meaningful cross-agency collaboration will likely be difficult if the NBIs are implemented nationally but may produce some positive results. Agencies are likely to learn from each other and make their LTSS systems more efficient if they build a shared infrastructure. On the other hand, some LTSS system changes may be more difficult to implement if doing so requires the approval and cooperation of multiple agencies and their respective stakeholders.

Concern for How NBIs Will Be Used Could Affect How States Complete the Survey

Both STP Grantee States and TEP members asked and expressed concerns about how CMS would use the NBIs, and, in particular, if CMS would use them to make comparisons across states. CMS staff stated that the information would be used to gain information on issues and promising practices related to developing person-centered and balanced LTSS systems and not to penalize States based on their performance in achieving this goal.

However, with that said, one TEP member commented:

> *I think to the extent that they [NBIs] are used to help states think through their systems and to move forward to determine what is the most parsimonious* [cost effective] *and reliable set of indicators, that all makes sense. I just worry that someone might take this and think 'now we are ready to compare states'.*

Another TEP member added:

> *Once there is information available, people will use it for all sorts of purposes for which it is not designed. Even if we say this is not meant for intra state comparisons it does not mean people are not going to do it.*

States might have an incentive to answer the questions included in the state self-assessment survey in a manner that presents the state in a certain light (e.g., progressive in providing balanced, person-driven LTSS) that does not accurately portray the current state of its LTSS system. CMS and states should clarify how a set of NBIs for LTSS will be used to encourage states to report accurately (e.g. data is collected for informational purposes only and will not be used to target funds, reprimand or otherwise impact a state).

Sustainability of Data Collection

States that implement the state self-assessment survey instrument will need to collect and organize a significant amount of information accurately and timely. Except for the data collected through a state's Medicaid Management Information System (MMIS), many states will need to develop new data and information systems to collect the required information. This could result in many state staff being involved in the effort and the need for additional funds.

Obtaining some of the required information from a state's MMIS may also be time consuming and costly. The federal government requires states to design, implement and maintain a MMIS. The objective of the system is to process claims for Medicaid, store and retrieve information needed by federal and state governments to manage and audit Medicaid programs. The majority of states contract with a third party through a competitive procurement process to perform the work related to designing, developing, installing or enhancing the state's mechanized claims processing and information retrieval system and to be the fiscal agent to operate a state's MMIS. The process is a significant undertaking and states contract for a number of standard reports to be generated on a defined schedule. Once the contract is executed, out-of-cycle reports requested by a state from its MMIS fiscal agent can take a large amount of time to obtain (due to the length of report request list) and can result in considerable additional costs to a state.

4.2 Lessons Learned

In addition to challenges, a number of lessons were learned related to the implementation of the NBIs. These are described in detail below.

Prioritize the Implementation of NBIs

One option to address the challenges described above would be to pare down the questions included in the survey instrument to those essential to gather the information necessary to implement the NBIs prioritized and to tell a compelling story of the states' progress related to developing a balanced, person-driven LTSS system. One TEP member reported:

> *Look at some of the questions and think through if they really can be answered. To me some are just plain too hard to answer and there is a lot there. Just looking at them and paring them down would be helpful*.

Another TEP member commented:

> *It seemed the questions* [for Indicator S4] *are a bit disproportionate from the rest* [of the indicators included in the Sustainability Principle]. *There is a lot of detail for these questions compared to questions for the other indicators in this Principle.*

Another option might be to develop a "short" survey instrument that all states are required to complete and a longer version of the survey that would be completed by states on a voluntary basis. This option was identified by one TEP member who served on both the NBIC and NBIP:

> *I wonder if we don't have an opportunity here and we don't want to lose it. I don't see other efforts out there that would be able to address the issues we are addressing here in the short term. I wonder if we need to consider having a "short" survey instrument [minimum indicator and question set] and a "long" survey instrument and use the short form to focus in on the few variables we think are essential to balancing. Make the short version a requirement for states to complete. Then have a "long" form of the survey that is voluntary for states to use or provide some incentives for states to complete it so we can get more information for research and analysis. I feel we are talking about some important information here and don't know other ways to get at it besides this effort. We have spent five years here contributing to items that we now may not think are the most important factors to look at.*

Collaboration across Agencies

Implementing comprehensive indicators for an entire LTSS system will require substantial collaboration at the federal level. CMS will need to collaborate with other federal agencies that provide funding and/or guidance to support states' efforts to build these systems, such as the Administration for Community Living and The Veterans Administration. Varying state agencies may be more likely to collaborate if they receive the same guidance from the respective federal agencies to which they report. In addition, it would be helpful if federal agencies asked for similar information, if appropriate, in their reporting requirements.

Build a Data Collection and Reporting Infrastructure

Encouraging states to employ data collection and system infrastructures to collect and organize the information necessary to implement the NBIs will require leadership and support from CMS and other relevant federal agencies. An example of a CMS initiative that supports states in a similar endeavor is the Demonstration Grant for Testing Experience and Functional Tools (TEFT) in Medicaid LTSS. A demonstration project might be developed for states in order to foster key data collection and systems infrastructure for collecting and organizing the information needed to complete the survey instrument and implement the NBIs. Other opportunities may include projects that are extended, such as Money Follows the Person (MFP). MFP funding is expected to end within three years per the Affordable Care Act. An extension of this program (or others like it) could incorporate funds to build the infrastructure necessary to implement the NBIs across the 47 MFP states.

CHAPTER 5. NBI IMPLEMENTATION-DATA COLLECTION

The purpose of the state self-assessment survey instrument is to collect the data and information necessary to apply the NBIs. The information collected through completion of the survey is comprehensive related to the provision of long-term services and supports and thus includes a variety of topics gathered from multiple state health, human services, and housing agencies and respondents. Due to the survey instrument's complexity, it should be executed in five phases and over at least a three month period.

Prior to having states complete the survey instrument, a number of steps should be taken to ensure accurate and timely data collection and reporting.

Step 1: Identify a survey coordinator in each state participating in the self-assessment survey.

It is essential that a survey coordinator be identified in each state participating in the survey. This person will be responsible for:

- Completing the next seven steps,
- Being the point person for any questions and/or comments CMS may have for the state during survey implementation, and
- Ensuring that milestones, deliverables and due dates are met and the information received is accurate, complete, high quality and timely.

Having a state survey coordinator in each state participating in the self-assessment survey will provide a single point for communication and logistics related to survey implementation and data collection and reporting between the CMS and participating states.

Step 2: Direct state survey coordinators to review the survey instrument in advance of implementation and allow time to address questions.

State survey coordinators should review the state self-assessment survey instrument in advance of implementation to identify any questions and confirm understanding of how to complete the survey and the information being collected and reported. In addition, time must be afforded to state survey coordinators to discuss, address questions and confirm commitment to completing the survey.

This step will ensure survey coordinators' understanding of the state self-assessment survey and process, confirm commitment to the process, reduce the number of follow-up questions received from states, and increase reliability and timeliness of data.

Step 3: Direct state survey coordinators to identify the appropriate state agencies for providing the information requested in the survey and obtain their commitment to participating in the survey.

State survey coordinators must identify the state agencies that will be most appropriate for providing the information requested in the survey. For example, questions related to housing policies and services may best be answered by staff from the state's housing administration. Once the appropriate state agencies have been identified, the state survey coordinator should review the survey section(s) and information he or she wishes to obtain from these agencies and obtain their commitment to participating in the survey. This step will mitigate potential confusion caused by significant variation in state organizational structures.

Step 4: Direct state survey coordinators to identify key staff at the state agencies identified to participate in the survey.

Once the state survey coordinator has identified and obtained commitment from the state agencies that need to participate in the self-assessment survey, he or she should work closely with these agencies to identify key staff members that are most suited to respond to the survey. This step will facilitate the receipt of timely, accurate, complete and high quality data.

Step 5: Direct state survey coordinators to allow the identified state agencies and key staff access and the ability to complete only survey questions related to their topic areas.

Each state agency and key staff members identified in Steps 3 and 4 should only have access and the ability to complete survey questions that have been designated as their topic areas. For example, housing administration agency staff may not be best suited to respond to LTSS direct service workforce training policies and therefore, should not have access to that section of the self-assessment survey. This approach will save time and effort and increase the likelihood of receiving timely, accurate, complete and high quality information.

Step 6: When sharing survey sections with identified state agencies and key staff, direct survey coordinators should review the relevant survey sections with them and allow time for questions and discussion.

Just as in Step 2 above, state survey coordinators should review the relevant section(s) of the state self-assessment survey and allow time for questions and discussion with the identified state agencies and key staff. This step will ensure participants' understanding of the survey and process, the information and data they are responsible for collecting and reporting, and their commitment to completing the survey.

Step 7: Establish timeline for conducting the state self-assessment survey.

A timeline for conducting the state self-assessment survey should be established in four phases. Each of the survey's four phases should take no more than two weeks to complete. Once the timeline is established, it should be shared with each state coordinator.

Step 8: Direct survey coordinators should share the established timeline with the identified state agencies and key staff and address any questions related to completing their section(s) of the survey and the data collection and reporting efforts.

State survey coordinators should share the established timeline with the identified state agencies and key staff indicating the start and end dates for the completion of their section(s) of the survey and data collection and reporting efforts. Affording time to address any questions or concerns is also important.

Once these steps have been completed, the state self-assessment survey should be executed in four phases, with two weeks allocated to complete each phase. This approach will facilitate the efficient implementation of the survey, allow for enough time for state agency staff members to complete their section(s) of the survey and ask questions as necessary; for state survey coordinators to respond to state agency staff questions, review information and data received and inquire about inadequate and/or missing information; and ensure that the most timely, accurate, complete and high quality data and information is collected and reported.

Once the survey is complete, the state survey coordinator must review the data collected once more to ensure the information and data are reported consistently and accurately across survey sections and questions, as the validity of analyses is dependent on the integrity of the information and data used to perform the analysis.

The state self-assessment survey is designed to be most challenging to complete during the first phase and least challenging to complete during the last phase of the survey. One advantage to this approach is to address respondent fatigue and allow the state survey coordinator more time to review responses provided during the first (more difficult) phase of the survey while the states continue to complete the remainder of the survey.

Exhibit 13 describes the survey phases by principle, indicator and level of difficulty to complete the questions for each indicator and provides a recommended sequence for responding to questions associated with each of the indicators based on the level of difficulty. The level of difficulty to complete each indicator was computed by determining the number of survey questions that must be addressed by a state respondent to complete an indicator. A low level of difficulty was determined if 15 or fewer questions had to be answered, a medium level of difficulty if 16-25 questions had to be answered, and a high level of difficulty if 26 or more questions had to be answered.

Exhibit 13: Survey Implementation Phases by Indicator and Principle

Principle		
Indicator	**Difficulty Level**	**Phase**
Self-Determination/Person-Centeredness		
SD1. Regulatory Requirements Inhibiting Consumer Control	High	1
SD2. Availability of Options for Self-Determination	High	
SD3. Risk Assessment and Mitigation	Low	
Total	**Medium/High**	
Community Integration and Inclusion		
CI1. Waiver Waitlist	High	1
CI2. Housing	High	
CI3. Supported Employment Options	Low	
CI4. Transportation	Medium	
Total	**Medium/High**	
Prevention		
P1. Health Promotion and Prevention	High	2
P2. Disaster/Emergency Preparedness	Low	
Total	**Medium**	
Coordination and Transparency		
CT1. Streamlined Access System	Low	2
CT2. Service Coordination	Medium	
CT3. Care Transitions	Low	
Total	**Low/Medium**	
Sustainability		
S1. Global Budget	Low	3
S2. LTSS Spending	Low	
S3. Direct Service Workforce	High	
S4. Support for Informal Caregivers	Low	
S5. Shared Long-Term Supports and Services Mission/Vision Statement	Low	
Total	**Low**	
Shared Accountability		
SA1. Fiscal Responsibility	Low	3
SA2. Personal Responsibility	Low	
SA3. Individuals and Families are Actively Engaged in Policy Development	Low	
SA4. Government, Provider and User Accountability	Medium	
Total	**Low**	
Cultural and Linguistic Competency		
CLC1. Needs Assessment and Target Population	Low	4
CLC2. Efforts to Design Services and Supports for Culturally and Linguistically Diverse Groups	Low	
CLC3. Cultural and Linguistic Competency Training Requirements	Low	
Total	**Low**	

CHAPTER 6. CONCLUSION AND NEXT STEPS

The purpose of the NBIP was to refine and expand upon the NBIs developed under the National Balancing Indicators Contract (2007–2010). The NBIs developed during the NBIC were the first step in creating a conceptual framework for developing and implementing a person-centered and balanced LTSS system and a set of indicators, scores, and ratings that can be used by CMS and states to examine efforts in implementing a balanced, person-driven LTSS system. This report has provided an overview of the project design and has described the challenges and lessons learned in developing and implementing the NBIs. It also provides an overview and rationale for the state self-assessment survey instrument as a tool to collect the information necessary to implement the NBIs and identify challenges, lessons learned and recommendations for implementing it in the future. The information included in the report can be used by CMS and other federal agencies as a guide for implementing the final set of NBIs, data collection requirements, data infrastructure development and other aspects of developing and executing a system for assessing the balance and person-centered nature of LTSS systems consistent with CMS's vision.

All of the principles and 17 indicators are included in the final set of NBIs, while another 7 are included as developmental indicators. In addition, 8 indicators have been recommended for scoring. The next step for CMS is to review the final NBIs, challenges and lessons learned related to NBI implementation and this report's recommendations for NBI implementation and determine the next steps. Prior to implementing the final set of NBIs, it is important that CMS consider the following concluding points and possible next steps:

- Except for the minimal face validity testing conducted through the receipt of feedback from the SPT Grantee States and LTSS Experts, the indicators were not evaluated based on validity or reliability. Validity and reliability testing are therefore recommended for the NBIs in the future.
- States should be encouraged to adopt the final indicators and utilize the Technical Assistance Guide (which includes the self-assessment survey tool) as a tool or process in which to collect the data necessary to implement the NBIs.
- To encourage state participation, some options to consider may include:
    - Make the implementation of the NBIs voluntary;
    - Work with partner federal agencies such as HUD and ACL to encourage use of the measures in grant programs or ACA initiatives (provided CMS can give the states funding), in which the scope of the NBI implementation may need to be a limited group of indicators for a particular grant/ACA program. Some possibilities are MFP, BIP, TEFT, Community First Choice, care management/coordination programs (like Medicaid chronic health homes), and ACL grant programs for ADRCs;
    - Incorporate some of the measures as measures for the HCBS waiver assurances (in this case the measures would apply to a limited population—the waiver population); or
    - Implement a new CMS demo with existing SPT states.

- Building an IT infrastructure is a difficult task for states, and CMS and other federal partners have the ability to assist measure implementation through other initiatives. For example, extending MFP infrastructure funding (beyond what the ACA authorized) would be an opportunity, as would other newly implemented demonstration projects such as TEFT. Another option would be building on the electronic assessment tools that states are being required to implement under certain programs (e.g., BIP, Community First Choice).
- For current CMS initiatives such as BIP, the measures could provide a broader look at state progress in rebalancing—current metrics for BIP center on institutional versus community spending. The NBIs may help some states whose expenditure measures do not meet CMS' expectations demonstrate other positive areas of balancing efforts.
- Quality indicators were not included in the NBIs to avoid duplicating efforts implemented by other CMS-funded projects (e.g., National Quality Enterprise). TEP members commented on the absence of quality indicators in the NBIs and thought that these needed to be included in any final set of NBIs developed. A recommendation might be to consider adding a select number of NBIs that address quality and include them and related questions in the state self-assessment survey instrument in the future.

Once CMS has considered these limitations and possible next steps, the final step is the implementation of the self-assessment survey tool for the selected NBIs. Information collected will inform CMS on the status of states' progress in implementing balanced, person-driven LTSS systems. CMS may or may not wish to develop a scoring methodology in order to compare states across measures, or implement the indicators without a scoring methodology in an attempt to better understand each state's individual progress.

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Hess, T., McNab, A., & Basoglu, A. *Reliability, Generalization of Perceived Ease of Use, Perceived Usefulness, and Behavioral Intentions*. *MIS Quarterly*, *38*, 1-57.

IMPAQ International and Abt Associates (2011). *National Balancing Indicators Final Report*. Submitted to Centers for Medicare and Medicaid Services.

Miller, E.A. & Mor, V. (2006). *Out of the shadows: Envisioning a brighter future for long-term care in America*. Brown University Report for the National Commission for Quality Long Term Care.

Appendix. Technical Assistance Guide

Please see the following attachment:

Howard, J., Zuckerman, I., Woodcock, C., Flanagan, S., Urdapilleta, O., Poey, J., Waterman, G., Ruiz, S., Clark-Shirley, L., (2014). *The National Balancing Indicators Technical Assistance Guide*. Centers for Medicare and Medicaid Services.