

Towards Common Data Elements for International Research in Long-Term Care Homes:  
Advancing Person-Centered Care

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## ABSTRACT

To support person-centered, residential long-term care internationally, a consortium of researchers in medicine, nursing, behavioral and social sciences from 21 geographically and economically diverse countries have launched the WE-THRIVE initiative to develop a common data infrastructure. WE-THRIVE aims to identify measurement domains that are internationally relevant, including in low, middle, and high income countries, prioritize concepts to operationalize domains, and specify a set of data elements to measure concepts that can be used across studies for data sharing and comparisons. This article reports findings from consortium meetings at the 2016 meeting of the Gerontological Society of America and the 2017 meeting of the International Association of Gerontology and Geriatrics, to identify domains and prioritize concepts, following best practices to identify common data elements (CDEs) that were developed through the U.S. National Institutes of Health/National Institute of Nursing Research's CDEs initiative. Four domains were identified, including organizational context; workforce and staffing; person-centered care; and care outcomes. Using a nominal group process, WE-THRIVE prioritized 21 concepts across the four domains. Several concepts showed similarity to existing measurement structures, while others differed. Conceptual similarity (convergence; e.g., concepts in the care outcomes domain of *functional level* and *harm-free care*) provides further support of the critical foundational work in LTC measurement endorsed and implemented by regulatory bodies. Different concepts (divergence; e.g., concepts in the person-centered care domain of *knowing the person* and *what matters most to the person*) highlights current gaps in measurement efforts and is consistent with WE-THRIVE's focus on supporting resilience and thriving for residents, family and staff. In alignment with the World Health Organization's call for comparative measurement work for health systems change, WE-

- 24    THRIVE's work to date highlights the benefits of engaging with diverse LTC researchers,
- 25    including those in low, middle, and high income countries, to develop a measurement
- 26    infrastructure that integrates aspirations of person-centered LTC.

27

## INTRODUCTION

28 Recently published position statements by the International Consortium of Professional  
29 Nursing Practice in Long-term Care Homes [1] and the International Association of Gerontology  
30 and Geriatrics Consensus Group [2] identify critical gaps in our empirical knowledge to support  
31 high-quality, person-centered residential long-term care (LTC). From a global perspective, key  
32 to accomplishing this agenda is a set of international common data elements (CDEs) that  
33 facilitates LTC data sharing and aggregation, improves LTC data quality, and supports common  
34 outcomes measures, among other benefits. In this article, we describe our efforts that draw on the  
35 National Institutes of Health (NIH) CDE initiative to support CDEs in research, through  
36 providing resource guides, an online repository, and supporting the development and use of  
37 CDEs in NIH-funded studies, [3] to identify CDEs for research in LTC homes that are relevant  
38 across countries and could be used internationally. The World Health Organization (WHO) has  
39 identified such comparative measurement work as one of the most critical levers for health  
40 systems change [4, 5].

41 **Defining characteristics of common data elements in relation to existing work**

42 Our efforts to identify LTC CDEs for global use are grounded in a person-centered and  
43 strengths-based ethos [6] with the purpose of developing residential LTC systems that support  
44 resilience and thriving among LTC residents, families and staff. Our person-centered and  
45 strengths-based perspective contrasts with the predominant LTC measurement paradigm, which  
46 tends to emphasize frailty and deficits, often with a single-resident focus without accounting for  
47 the interactions and outcomes of staff, families, or the larger context [1, 7]. Deficit-based  
48 measurement has frequently been deployed with an emphasis on supporting regulatory  
49 compliance and reimbursement; importantly, the majority of comparative measurement

50 infrastructures globally have emerged from this paradigm [8, 9]. Recent examples include the US  
51 Centers for Medicare and Medicaid's quality measures of post-acute care, such as percentage of  
52 residents who were re-hospitalized after a nursing home admission, and/or had an emergency  
53 department visit [10], which emphasize outcomes linked to monetary penalties without attention  
54 to person-centered care goals [11] or an older adult's trajectory of intrinsic capacity [12].  
55 Similarly, England's National Health Service [13] recently implemented an electronic Frailty  
56 Index (eFI) as the basis of mandated and compliance-regulated assessment of older people with  
57 progressive frailty by General Practitioners. This deficit-focused infrastructure has been ~~and will~~  
58 ~~continue to be~~ instrumental in advancing patient safety and care quality. However, the  
59 underlying paradigm limits our ability to shift to an international, person-centered LTC research  
60 infrastructure that advances and supports well-being and quality of life among older adults, their  
61 families and care workers. This shift is consistent with WHO's World Report on Ageing and  
62 Health [14] and call for a move towards a focus on capacity rather than frailty.

63 To foster a shift to person-centered, strengths-based LTC research, we have created an  
64 international consortium of LTC researchers based in 21 geographically and economically  
65 diverse countries, the Worldwide Elements To Harmonize Research In long-term care liVing  
66 Environments (WE-THRIVE) consortium. WE-THRIVE's overarching goal is to  
67 collaboratively develop an international LTC research measurement infrastructure that can be  
68 used efficiently in diverse, residential LTC settings for comparative research to advance person-  
69 centered care for resilience and thriving among residents, staff, and family members. To achieve  
70 this overarching goal, our work is carried out in two sequential phases. The first phase focuses  
71 on identifying fundamental measurement domains and concepts of residential LTC that are  
72 important internationally, and the second phase focuses on establishing consensus on core data

73 elements to measures concepts within each domain. This paper reports the process and findings  
74 related to phase one.

## 75 APPROACH TO CONSENSUS-BUILDING

76 WE-THRIVE's overall approach is guided by best practices in CDEs developed by the  
77 U.S. National Institute of Nursing Research-funded symptom science research centers [3]. Their  
78 approach, developed in alignment with The International Organization for Standardization (ISO)  
79 and International Electrotechnical Commission's standards for metadata registries [15],  
80 encompasses three broad activities for developing and using CDEs, including ensuring  
81 conceptual consistency, implementing group processes for identification and selection, and  
82 developing data collection and management protocols.

83 WE-THRIVE was initiated in November 2016; to date, we have engaged in a  
84 comprehensive, multi-step group process to identify core measurement domains of residential  
85 LTC and corresponding concepts (phase 1), which will inform the future selection of data  
86 elements, and the development of data collection and management protocols (phase 2). The  
87 consortium includes 59 researchers from 21 countries, including researchers from lower-middle,  
88 upper-middle, and high-income countries who are conducting research in diverse settings of  
89 residential LTC. While the majority of participants are from only 2 of the 21 countries (US=14;  
90 UK=11), there is a relatively equal distribution of researchers from the Americas (21), Europe  
91 (17), and the Western Pacific and Southeast Asia (21) regions. We do not yet have collaborators  
92 from the Eastern Mediterranean and African WHO regions. Regarding discipline, the majority  
93 of participants are from nursing (N=43); other represented disciplines include medicine (N=5),  
94 and social and behavioral sciences (N=11). Our inclusive approach is congruent with the ISO  
95 Action Plan for Developing Countries [16], developed in alignment with the United Nations'

96 Sustainable Development Goals [17].

97 **Identifying International LTC Measurement Domains**

98 WE-THRIVE's phase 1 work to identify measurement domains and concepts has  
99 included: beginning with convening as a group in 2016 to generate domains; forming domain  
100 sub-committees and conducting a series of eight steering committee and nine domain sub-  
101 committee meetings; and convening again as a full group in 2017.

102 *Convening workshop: Generating Domains.* WE-THRIVE first convened in a half-day  
103 workshop at the 69<sup>th</sup> annual meeting of the Gerontological Society of America (GSA) in  
104 November, 2016, in New Orleans, Louisiana. Sponsored by the GSA Interest Group on LTC  
105 Systems Research, participants included 27 LTC researchers from 11 countries, including  
106 Canada, China, Japan, Korea, Norway, Spain, Sweden, Switzerland, Thailand, the United  
107 Kingdom, and the United States. Participants were invited through GSA's pre-conference  
108 workshop marketing materials, the GSA Interest Group's list-serv, and one-on-one invitations by  
109 interested Interest Group members to non-members who have previously conducted research in  
110 the LTC measurement arena. During the workshop, we reviewed NIH's CDEs framework,  
111 conducted breakout group discussions regarding critical domains for LTC measurement, and  
112 reached consensus on four domains for LTC measurement that are salient internationally,  
113 including: (1) organizational context (external and internal to the residential care setting), (2)  
114 workforce and staffing, (3) person-centered care, and (4) care outcomes. Following the GSA pre-  
115 conference workshop, WE-THRIVE membership expanded as participants reached out to discuss  
116 the session with colleagues who were not present at GSA, and who expressed interest in the LTC  
117 CDEs development work.

118 *Post-workshop effort: Refining Domains, Engaging Stakeholders and Generating*

119 *Concepts.* Between GSA and the 21<sup>st</sup> meeting of the International Association of Gerontology  
120 and Geriatrics (IAGG) in July, 2017, WE-THRIVE members met in sub-committees  
121 representing the four domains using a computer-based video-conference platform to begin  
122 identifying important measurement concepts within each domain. Each domain committee  
123 included chairs or co-chairs who facilitated domain-specific discussions. Domain-specific  
124 discussions focused on potential concepts in each domain that were common to LTC settings  
125 across represented countries. The domain committee chairs met in monthly WE-THRIVE  
126 steering committee meetings to report updates and share challenges and ideas across subgroups.

127 Because of the group's commitment to global inclusiveness, a standing item for the  
128 steering committee and the domain committee meetings was to identify new WE-THRIVE  
129 members, especially those from low and middle-income countries (LMICs), to vet the work to  
130 date. We reviewed professional networks to identify LMIC-based colleagues for one-on-one  
131 outreach; two of the schools represented by the steering committee are WHO Collaborating  
132 Centres with enhanced networks. New colleagues were invited to attend distance-based  
133 meetings via computer conference calls. IAGG marketing and communications disseminated  
134 information globally about our second workshop; we provided limited scholarships to LMIC  
135 colleagues to support attendance, as well as encouraged those who could not attend to continue  
136 to participate asynchronously pre- and post- the IAGG workshop. We built an inclusive, flexible  
137 network of researchers with ongoing participation through face-to-face or distance-based  
138 technology that was not limited to researchers who could attend IAGG 2017. This approach is  
139 consistent with the ESSENCE on Health Research initiative's principle of building collaborative  
140 networks to strengthen LMIC research capacity [18]. Through this effort, WE-THRIVE  
141 membership continued to expand in size and diversity.

142            *Second workshop: Nominal Group Process for Concepts.* Building on the GSA  
143        workshop and the domain committee work, WE-THRIVE convened in a full-day pre-conference  
144        workshop—*Common Data Elements for International Research in Long-Term Care*—at IAGG  
145        in San Francisco on July 23, 2017. This workshop was open to all; participants included 55 LTC  
146        researchers from 13 countries, including 4 LMICs.

147            Drawing upon all previous activities related to identifying core domains and concepts, the  
148        consortium adopted a nominal group technique [19-21] to further specify a set of measurement  
149        concepts within each of the four domains. The nominal group technique is a structured group  
150        process to prioritize ideas and build consensus using both silent, idea-generation and group  
151        discussion phases; it has been used previously by international groups for consensus-  
152        development in both research and non-research settings [22, 23]. This approach is consistent  
153        with the consortium’s inclusive approach to ensure all participants can contribute their  
154        perspectives in a way that does not privilege any one culture’s engagement style.

155            We convened the workshop by reviewing WE-THRIVE goals, presenting summaries of  
156        the background work to date, including descriptions of the domains, and describing the steps of  
157        the nominal group process. Next, participants selected a domain group to join and domain  
158        committee chairs facilitated the domain-specific nominal group process. Nominal group  
159        facilitation was standardized in two ways. First, a nominal group process implementation  
160        manual was developed for use by the domain group chairs. Second, each domain chair was  
161        assisted by a graduate student or post-doctoral research fellow who was trained in using the  
162        manual prior to the workshop. Domain groups completed the following six steps: individual,  
163        silent generation of possible concepts within a domain (step 1); group turn-taking to share all  
164        ideas and eliminate any duplicates (step 2); group discussion and feedback of generated concepts

165 (step 3); individual, confidential voting for the top 5 concepts considered the most important to  
166 measure across LTC settings internationally (step 4); tally of votes assigning rank scores of 5 to  
167 1 for each individual's ranked concepts from highest ranked concept (score of 5) through fifth  
168 ranked concept (score of 1) (step 5); and discussion of results (step 6). These steps were  
169 followed by a full-plenary session reporting out and discussion of the within-domain group  
170 results. Bringing domain group results to the full plenary for discussion facilitated a vetting of  
171 candidate concepts within each domain by all researchers participating in the workshop across 13  
172 countries, rather than the subset of researchers within each domain subgroup.

173 Through the nominal group process, we established consensus on a key set of  
174 measurement concepts within each domain and identified cross-country differences in the  
175 importance or meaning of the measurement concepts. Throughout the subgroup discussions,  
176 domain chairs ensured concepts identified by partners who were not present at IAGG were  
177 discussed, and encouraged participants to ask questions and share divergent perspectives. As an  
178 additional strategy for inclusivity, participants were encouraged to write on boards around the  
179 room any thoughts not captured during the nominal group process, organized in accordance with  
180 MyHomeLife's [24] Collaborative Sensemaking Tools (<http://myhomelife.org.uk/wp-content/uploads/2014/11/Collaborative-Sense-Making-Tool.pdf> ).

182

## 183 RESULTS

### 184 Nominal Group Process: Domains and Concepts

185 Across the four LTC domains, participants prioritized 21 measurement concepts for  
186 which CDEs could efficiently support international research on critical LTC issues. Within each  
187 domain, the workshop participants prioritized five concepts. Table 1 summarizes the prioritized

188 concepts following the nominal group process. Total rank score for each concept reflect the sum  
189 of rank scores across all domain group members. Because we established a priori that  
190 participants should vote for the top 5 priority concepts, domain groups varied considerably in  
191 terms of the extent to which all 5 concepts were selected as of relatively equal weight (that is,  
192 total rank scores were similar) versus domains with 1 or 2 concepts for which there were  
193 markedly higher ranking scores, relative to the remaining prioritized concepts.

194       **Organizational context.** Within the Organizational Context domain, participants (N=7)  
195 from China, Japan, Sweden, the United Kingdom and the United States generated 87 candidate  
196 concepts as relevant to the organizational context of residential LTC in their countries. Six  
197 concepts were prioritized as most important to measure. All six concepts were endorsed by the  
198 full plenary (Table 1). Concepts included *social resources and support* for the organization;  
199 *regulations* that affect the organization; characteristics of *funding* of care; organizational  
200 *leadership hierarchy and role*; as well as the *interface between leadership and management*; and  
201 characteristics of a *desirable working environment*. Of these concepts, external contextual  
202 factors of social resources and support, regulation, and funding, were given similar ranks by  
203 participants (sharing 20%, 20%, and 14 % of total rank scores, respectively), and ranked higher  
204 overall than internal contextual factors related to concepts of leadership and work environment.

205       **Workforce and staffing.** Within the Workforce and Staffing domain, participants (N=8)  
206 from Brazil, Canada, Norway, the United Kingdom, and the United States generated 85  
207 candidate concepts as relevant to workforce and staffing in residential long-term care in their  
208 countries. After clarifying and prioritizing discussions, five measurement concepts were  
209 prioritized as most important to measure and were endorsed by the full plenary (Table 1).  
210 Concepts included *staff skills, attitudes, and knowledge* in relation to residents' needs; *staff*

211    *collaboration and teamwork*, which was discussed as including supervisory control and feeling  
212    supported; *training and self-efficacy of staff*, including educational opportunities; *staff retention*  
213    and *turnover*, including staff's sense of feeling valued, wage competitiveness, and the desire to  
214    stay in the job; and *leadership and supervisory effectiveness*, including delegation and task  
215    allocation. Staff skills, attitudes and knowledge was ranked higher overall than all other  
216    workforce and staffing concepts, as the dominant concept from this domain, garnering 30% of  
217    total rank scores.

218            **Person-centered care.** Within the Person-Centered Care domain, participants (N=12)  
219    from Canada, China, Japan, South Korea, Thailand, the United Kingdom, and the United States  
220    generated 112 candidate concepts as relevant to person-centered care in their countries. Through  
221    the clarification and voting process, five measurement concepts were prioritized as the most  
222    important to measure and were endorsed by the full plenary (Table 1). Concepts included  
223    *relationship*, with consideration for relationships among all persons who are part of the  
224    residential care settings, including residents, staff, and family; *knowing the person*; identifying  
225    and addressing *what matters most to the person*; supporting *meaningful engagement*; and  
226    supporting a *positive environment*. Relationship was the primary concept ranked as most  
227    important in this domain, with 21% of total rank scores, followed by knowing the person, with  
228    13% of scores. All other concepts had considerably lower proportions of scores.

229            **Care outcomes.** Within the Care Outcomes domain, participants (N=11) from Hong  
230    Kong, Jamaica, Japan, Sweden, Switzerland, the United Kingdom and the United States  
231    generated 122 candidate concepts as relevant to care outcomes in residential long-term care in  
232    their countries; five concepts were prioritized through the discussion and voting process as most  
233    important to measure. All five were endorsed by the full plenary (Table 1). Concepts included

234     *symptom management*, especially pain management; *functional level*; *well-being*; *personhood*,  
235     which was discussed as, ‘letting people be people’; and *harm-free care*, which was discussed as  
236     the absence of several avoidable, adverse outcomes, including pressure ulcers, falls, and  
237     medication errors. Symptom management was the highest ranked concept, with 20% of total  
238     possible rank scores. Functional level and well-being also were higher, with similar rankings of  
239     16 and 14% of total rank scores, respectively.

#### 240     **Collaborative Sensemaking Themes: Ideas for Reflection**

241              Participants posted 71 comments on boards in the meeting room during the nominal  
242     group process session. Of these, two sets of comments raised unique issues that were not  
243     otherwise discussed during the nominal group process and therefore not captured in the final set  
244     of ranked concepts. The first set (N=8 comments) identified barriers to inclusion in the WE-  
245     THRIVE process; this was the largest set of comments. Identified barriers included the  
246     following: meeting attendance costs and time away from home institutions pose significant  
247     barriers for face-to-face LMIC-based researchers’ participation; the assumption of the  
248     importance of person-centered care as culturally embedded and difficult to challenge; the risk  
249     that one may lack effective strategies to explore ontological assumptions in others’ worldviews  
250     and therefore focus on what is relevant to one’s culture alone; and the tension between making  
251     decisions to move forward as a group and the need for ongoing, iterative engagement, especially  
252     with LMIC-based researchers, over time. The second set (N=6 comments) pointed out the  
253     importance of recognizing and challenging our underlying assumptions about the role of families  
254     in LTC settings as positive and desired. For example, comments included discussion of how  
255     families may not always be desired by residents in care settings.

#### 256     **IMPLICATIONS FOR PRACTICE, POLICY AND/OR RESEARCH**

257           Advancing a parsimonious set of CDEs that could be applicable across diverse residential  
258 long-term care settings internationally, requires questioning the extent to which our current  
259 measurement paradigms embrace more global aspirations to support thriving among older adults,  
260 their families, and care staff. Our WE-THRIVE Consortium identified four domains with related  
261 concepts for measurement that both converge and diverge with the predominant, deficits-based  
262 framework. Convergence and divergence were defined as the degree to which our findings agree  
263 or disagree with residential long-term care measurement constructs from extant research using  
264 other approaches, consistent with a mixed-methods approach to integrating data [25, 26].

265 Concepts that converge with extant measurement efforts ~~Convergence~~ highlight the critical  
266 foundational work in long-term care measurement conducted by researchers and endorsed and  
267 implemented by regulatory bodies, such as InterRAI,[27]. Concepts that diverge ~~yet divergence~~  
268 invite us to consider key gaps needed to specify a person-centered, strengths-based measurement  
269 framework that can be meaningfully applied internationally.

270           The Organizational Context domain working group identified key parameters historically  
271 captured in organizational studies of residential long-term care settings, such as regulation and  
272 funding (see, for example [28]), but also prioritized components of the social context of care,  
273 leadership and the work environment. This prioritization is consistent with more recent  
274 measurement and empirical work of the context of care from non U.S.-based research teams,  
275 such as Estabrooks et al's [29] work identifying eight contextual concepts of residential long-  
276 term care settings that have been related to outcomes such as symptom burden.

277           Similarly, the Workforce and Staffing domain working group endorsed historically  
278 relevant concepts of staffing ratios or turnover in long-term care, while highlighting the extent to  
279 which staff are integrated into teams with effective leadership support and opportunities to learn.

280 This latter emphasis also is consistent with recent findings from non U.S.-based research teams,  
281 about the direct effects of how staff are supported and developed on both staff and resident care  
282 outcomes [30].

283 The Person-centered Care domain working group coincided with U.S. DHHS/CMS  
284 issued regulatory changes that require documentation of resident preferences for person-centered  
285 care [31]. Our findings indicated that measuring preferences, while salient, was not ranked in the  
286 top five concepts. The highest ranked concept, relationships, was the predominant concept of  
287 person-centered care. This finding is consistent with more recent international statements of the  
288 quality of relationships, or relationship-centered care, as fundamental drivers of person-centered  
289 care in residential LTC [1].

290 Similarly, during a time of important growth in technical capacity to support expansion of  
291 MDS-like data registries across multiple countries [32], the Care Outcomes domain working  
292 group prioritized conceptually consistent measures of functional level and harm-free care, which  
293 was operationalized as the absence of a variety of avoidable, adverse outcomes such as pressure  
294 ulcers and falls, that are commonly associated with outcomes indicators [10]. This  
295 operationalization relates to the National Health Service in England's harm-free care composite  
296 measure that draws upon pressure ulcers, falls, urinary tract infection, and venous  
297 thromboembolism [33]. The working group also prioritized symptom management as most  
298 important, and added well-being and personhood. These latter concepts are consistent with the  
299 European Union's framework of the PROGRESS Programme's recommendations for residential  
300 LTC measures [35]. Findings support the importance of refining how symptom experience and  
301 symptom management are meaningfully included, as well as understanding the  
302 interconnectedness of care outcomes with personhood to ensure quality of life.

303       The construct of functional level in the care outcomes domain also relates to the WHO  
304   operationalization of functional capacity [12], which arises from an older adult's intrinsic  
305   capacity in relation to environment and contrasts with a frailty and deficits-based model. Situated  
306   in a broader international debate that is starting to emphasise constructs such as resilience [34] as  
307   having explanatory value in care of older adults, consideration of intrinsic capacity and resilience  
308   in our next steps may facilitate moving beyond historic approaches to capturing function in a  
309   way that is consistent with the strengths-based ethos of WE-THRIVE.

310       Next steps to accomplish the larger goal of WE-THRIVE include building on these initial  
311   efforts to move from candidate concepts to well-defined concepts with measures that have been  
312   broadly vetted across diverse socio-cultural contexts and with multiple LTC stakeholders. The  
313   purpose of CDEs is not to generate a comprehensive battery of recommended measures, but  
314   rather to endorse a parsimonious subset of data elements that can be embedded within current  
315   and future LTC research data collection efforts. Such vetting and selection will require in-depth  
316   consideration of issues of inclusion to foster transparency and deliberative dialogue of  
317   underlying assumptions within each domain, addressing the limitations raised by participants in  
318   our collaborative sensemaking exercise as well as in previous studies of limitations in cross-  
319   cultural measurement efforts. [36, 37]

320       Therefore, it will be essential to engage with stakeholders in residential LTC settings,  
321   including direct care staff, residents and their families, consistent with established frameworks  
322   for patient and public involvement (e.g., the UK National Institute for Health Research's  
323   National Standards for Public Involvement [38]). Drawing upon Huber et al [39], we might  
324   anticipate that domains may be weighted differently by stakeholder perspective, concepts within  
325   domains may be ranked differently, and that there may be omitted domains and/or concepts.

326            Additionally, we will need to engage with more researchers based in LMICs, including  
327    countries from the Eastern Mediterranean and African WHO regions, and strengthening the  
328    interdisciplinarity of the consortium, while employing new strategies of engagement that move  
329    beyond more traditional academic-researcher approaches to international research collaborations.  
330    For example, modest scholarships do not effect systemic barriers to travel to international  
331    conferences where our working sessions have been conducted, video-conferencing does not  
332    ameliorate a lack of slack resources to engage in domain working groups in an ongoing basis,  
333    and engaging in a consortium with a previously-developed platform necessarily limits  
334    opportunities to raise issues of domain and concept equivalence across different ontological or  
335    axiological worldviews.

336            Ultimately, our ability as a scientific community to support a rapidly evolving, global  
337    residential long-term care infrastructure will require new ways of engaging with our peer-  
338    researchers across low, middle and high income countries, and the development of a  
339    measurement infrastructure that integrates aspirational perspectives of thriving and resilience in  
340    aging. The WE-THRIVE Consortium's work to date indicates both the potential of this  
341    approach to begin to build inclusive global networks, as well as our shared capacity to leverage  
342    and enhance, rather than replace, existing measurement tools.

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Table 1.

*Domain Concepts and Prioritization Rank Scores (N=55 plenary participants)*

Domain	Concept	Rank Scores (%) <sup>1</sup>
Organizational Context (N=7 participants)	1. Social resources and support 2. Regulation 3. Funding 4. Leadership hierarchy and role 5. Leadership & management interface 6. Desirable working environment	21 (20.0) 21 (20.0) 15 (14.3) 10 ( 9.5) 9 ( 8.6) 9 ( 8.6)
Workforce and Staffing (N=8 participants)	1. Staff skills, attitudes, and knowledge 2. Staff collaboration and teamwork 3. Training and self-efficacy of staff 4. Staff retention and turnover 5. Leadership and supervision effectiveness	36 (30.0) 17 (14.2) 16 (13.3) 11 ( 9.2) 9 ( 7.5)
Person-Centered Care (N=12 participants)	1. Relationship 2. Knowing the person 3. What matters most to the person 4. Meaningful engagement 5. Positive environment	39 (21.2) 24 (13.3) 13 ( 7.2) 12 ( 6.7) 9 ( 5.0)
Care Outcomes (N=11 participants)	1. Symptom management 2. Functional Level 3. Well-being 4. Personhood 5. Harm-free care	33 (20.0) 26 (15.8) 23 (13.9) 16 ( 9.7) 9 ( 5.5)

<sup>1</sup> Rank score percentages do not total 100, as only the 5 highest scoring concepts are presented in the table