

Connecting Credentials

BUILDING LEARNING-BASED CREDENTIALING SYSTEMS

Building Trust in Credentials

Work Group Report

November 2017

Forward

Connecting Credentials is a collaborative effort of more than 120 national organizations and more than 3,000 stakeholders to make credentials easier to understand, use and interconnect. Credentials include degrees, certificates, diplomas, professional and industry certifications, licenses, and micro-credentials such as digital badges. Credentials connect people to jobs, education programs and career pathways.

In April 2017, Connecting Credentials convened five workgroups of diverse leaders in credentialing reform to tackle particularly challenging aspects of achieving the vision of a learner-centered credentialing ecosystem articulated in the 2016 [From National Dialogue to Collective Action: Building Learning-Based Credentialing Systems](#). The workgroups were asked to recommend actionable steps that should be taken to address the credentialing needs and priorities of diverse learners, especially adults with no recognized postsecondary education, in the complex and highly dynamic credentialing marketplace. With this equity focus, they addressed the following questions:

- **Building Trust in the Quality of Credentials:** How can we increase the quality, quantity and pay-off of credentials for all students, especially for those with no other postsecondary credentials?
- **Equipping Adult Learners to Attain Market-Valued Postsecondary Credentials:** How do we equip and empower adults with no postsecondary credential to navigate, persist and succeed in selecting and attaining postsecondary credentials that lead to educational and economic advancement?
- **Aligning Demand and Supply Signals:** What should be done to better align diverse credentialing processes and products with emerging employer hiring practices so that job applicants are evaluated based on what they know and can do, rather than who they know and where they went to school?
- **Improving Learner Mobility:** How can we improve credential stackability and portability, especially for adults with little or no prior postsecondary education?
- **Making All Learning Count:** How can we reliably and consistently recognize learning that takes place in informal and workplace settings?

This report and those of the other four work groups can be found at www.connectingcredentials.org. Each workgroup started with the recognition that the predicted disruptions in our learning and credentialing systems already have begun to transform these systems. More diverse learners with different needs and priorities are engaging in postsecondary learning than ever before. The speed of change in the clusters of competencies required at work is accelerating. The proliferation of learning and credentialing options, including substantial expansion of work-based learning, continues unabated, leaving credential seekers confused about what credential and pathway to pursue and credential providers and their quality assurers trying to adjust to this changed environment.

Together, the workgroups contributed to our understanding of the interconnectedness and systemic nature of these challenges, identified leading-edge policies and practices to address these challenges and provided useful guidance for moving forward on multiple fronts.

Introduction

Trust is an essential component of markets. Take currency for example – people accept it because they trust that they can exchange it for goods, bank it for later, or invest it for growth. When trust in currency collapses, people turn to alternative forms of investment, with significant economic repercussions. Credentials function in much the same way. Ideally, they enable those who earn them to obtain recognition for their knowledge and skills in the highly dynamic 21st century labor market. But for this market to function correctly, students, educators, and employers must be able to trust that credentials are accurate, up to date, and incorporate high-value content. Unlike with currency, however, trust in credentialing remains in short supply, which is a critical reason why the credentialing marketplace operates so poorly.

To change this dynamic, educators, workforce practitioners, and policymakers need to explore new strategies, and expand existing strategies, that have the potential to drive greater trust in credentials. There are a number of approaches to consider, such as enhancing access to credentialing programs, developing educational and career pathways that lead to more advanced credentials and higher paying jobs, ensuring that credentials are portable (have value outside of the institution or region in which they were awarded), and making sure the costs of credentialing are affordable.

This paper, part of Lumina Foundation’s Connecting Credentials Initiative, was derived from the proceedings of a Building Trust work group made up of members from across the credentialing landscape (membership information can be found in the appendix). The group was charged with outlining the role of trust in the credentialing marketplace, exploring mechanisms that both build and erode trust, and then summarizing these discussions, including resulting action steps, in this report.

What is Trust?

Trust is the firm belief that a credential is reliable, accurate, comprehensive, up to date, and/or of high value. But because trust is highly dependent on context, these values are not absolute. In other words, whether or not you trust a credential is highly dependent on what you want to do with it. For example, a college might trust a credential because it comes from another organization with whom they have an articulation agreement. An employer might trust the very same credential because it contains the exact high-demand skills they have been looking to add to their workforce, and a student might trust the same credential because it allowed their friend to land a good job.

Trust is fundamental to a successfully operating credentialing marketplace because efficient market functioning hinges on reliable signals, just like the supermarket relies on the customers’ money not being counterfeit. Below we outline several key aspects of trust that need to be considered:

- **Trust is both logical and emotional.** This means that to some degree it is reliant on evidence, or a logical process that demonstrates value, but it can also come from intuition, or a “gut feeling” absent of strong evidence. Often times trust comes from both factors.
- **Trust is multidimensional.** The degree to which we trust, or don’t trust, a particular credential derives from the interaction of a number of personal and systemic factors. For example: Is the credential familiar? Is it clear what it offers? Did we have positive experiences with it in the past? What do people in our social networks think about it? Has it a credible third-party entity provided some level of endorsement or quality assurance? What is the evidence for its utility in achieving desired outcomes for learners and for employers? Rarely do we derive a feeling of

trust from a single factor either. Instead, it is the interaction of multiple factors that determine the degree to which we trust something.

- **Trust is dynamic.** Trust is measured in degrees, meaning that someone can have low, moderate or high levels of trust in something, and those values vary over time or in response to new information. Likewise, once trust is gained it may need to be maintained, and once trust is lost, it can be regained, albeit with greater difficulty than it was originally gained.

There are three interrelated conditions that promote trust in and the trustworthiness of credentials-- **quality, evidence and transparency**. The report builds on the workgroup's belief that any effective credentialing strategy must build trust with respect to all three conditions. Focusing on just one is insufficient. The three conditions are as follows:

Quality: Credential quality is the degree to which a credential meets the expectations of the stakeholder. Or put another way, does the credential have value? Quality is determined by stakeholder perceptions along with adherence to formal standards or norms¹, which include the following dimensions:

- Quality of educational experiences -- from an equity perspective, this includes nondiscriminatory curricula and assessments, and whether individuals can access credentialing programs, on-ramps and credentialing pathways regardless of where they live or their financial means;
- Relevance of learning outcomes and credentials;
- Validation of competencies represented by the credential;
- Alignment of educational programs, certifications, state licenses and the competencies represented by the credential with labor market needs;
- Internal alignment of elements of educational programs - curriculum, pedagogy, assessment, faculty, experiential learning, internships, etc.; and
- Transparency regarding the purpose of the credential and the competencies it purports to represent.

Evidence: Evidence is the information or data available to convincingly demonstrate the value of a credential. There are three categories of evidence on the validity of claims by credential providers and credential holders:

- Evidence on outcomes – e.g., completion, employment or employability, labor market (validity of data, relevance of metrics), success on the job etc.);
- Evidence of learner competencies imbedded in/represented by the credential itself – e.g., expanded student records, badges (assessments, trust in attestations and demonstrations of competency); and

¹ The American Council on Education's *Dimensions of Quality for Connected Credentials* defined the following quality dimensions: transparency; modularity; portability; relevance, validity and equity and discussed how diverse credentials generally shape up relative to the criteria developed. Here, we focus on what should be done to bring about improvements in these dimensions across the credentialing ecosystem.

We imbed the previously identified quality dimensions in our broad definition of quality. Because of their importance, we highlight transparency and communication and make evidence, which was implicit in the ACE dimensions, distinct strategies for building trust in and the trustworthiness of diverse credentials. Further, we imbed equity as a critical dimension of strategies to improve quality, transparency and evidence.

- Evidence of value, impact and trust provided through evaluations of programs and stakeholders like credential holders and employers and external quality assurance agencies, and through other research.

The quality of evidence varies based on the source of data (e.g., self-report by individual; credential provider) and constraints related to the availability of data, and the quality of data (i.e., its currency, reliability, consistency, and validity). The kind and level of evidence needed depends on the question(s) different stakeholders want to answer and the level of confidence they require in these answers.

Transparency: Transparency comes from the communication of clear and valid information to key stakeholders about the competencies represented by the credential, and the credential’s purpose, quality, outcomes and impact. To be transparent information needs to:

- Meet required standards of evidence;
- Be shared through easily accessible and understandable language for all relevant audiences; and
- Be relevant to users’ needs. For example, learners need to have information about the full cost of education and their capacity to sustain themselves while in education, Return on Investment (ROI), and options for negotiating for discounted tuition.

What needs to be done to build trust?

To build greater trust, we need improvements across the three domains of trust—quality, evidence and transparency. We need quality assurance processes to become more transparent and aligned with workforce needs and to promote adherence to, and continuous improvement of, these standards. We need more complete and comprehensive data collection and research/evaluation efforts to produce evidence of credential outcomes and value. We need increased transparency and much greater investment in guidance to help users make informed choices about a credential’s value for their purposes. To make informed choices, consumers, especially “first-generation learners,” need help and context to understand what data are important, what the data mean, and how to rely on evidence and data to make decisions. Below we make recommendations to address these needs.

What are leading practices to increase trust in credentials?

We find that there are a number of encouraging signs and new ventures attempting to address the need for greater trust and progress is being made across the three domains of trust: quality; evidence and transparency:

Diverse stakeholders are developing new quality assurance approaches in response to the accelerating pace of change in the labor market and demands for a new level of institutional and program accountability. Innovative activities include the following:

- The [Quality Assurance Commons](#) is designing and piloting a **certification process for essential employability qualities** in (initially) degree programs. Twenty-seven programs from fourteen institutions are assisting in co-designing the process across a wide range of disciplines,

institutional types and modalities of instruction. The goal is to focus on the demonstrated capacities of graduates in those areas employers most often find missing: communication, problem-solving, critical thinking, teamwork, motivation, etc. The QA Commons has developed a set of Essential Employability Qualities that programs will map to, as well as criteria reviewing transparency and accuracy of information about the program and graduates and the role of institutional support for completion and career pathways.

- Under the [U.S. Department of Education’s Experimental Site authority](#), educational institutions and their partners are exploring ways to **assure the quality of more diverse programming such as short-term credentials, competency-based programs and programs provided through non-accredited entities** so that they can become eligible for Title IV student financial aid eligibility. By undertaking these experiments, the federal government recognizes the potential of credentials or institutions in a way that can build trust.
- Through its [Talent Pipeline Management initiative](#) (TPM), the US Chamber of Commerce Foundation is promoting **employer-led action to organize and manage a preferred provider network of education and workforce partners** that are measured and rewarded based on their ability to deliver a skilled workforce. Using this approach, partners use shared leading and lagging measures to manage performance and promote continuous improvement —from outreach and recruitment to hiring, onboarding, retention, and full productivity. TPM encourages using both shared and internal performance dashboards to increase transparency and accountability across all partners.
- [The American National Standards Institute \(ANSI\)](#) has a very comprehensive **accreditation** program using American National Standards to accredit certifications and certificate programs. The Certificate Accreditation Program (ANSI-CAP) provides neutral, third-party attestation that a given certificate program meets an American National Standard and provides quality benchmarks for the design of future certificate programs. This standard requires accredited programs to meet predefined industry requirements for content, follow predetermined processes, and include constant feedback for quality improvement.
- The Interstate Renewable Energy Council (IREC) used the ANSI standard to pilot a **streamlined process for developing badges for their industry** that is intended to be “rigorous, nimble and cost-effective, while also responsive to rapidly evolving skills and industry demands.” [Key lessons](#) are that: establishing a common definition and sub-set of skills to be covered by the micro-credential is critical early in the implementation process to prevent scope creep; and employer engagement in remote working environment can be successful, despite anticipated level of attrition.
- Entangled Solutions is creating an [external audit format](#) for **verifying claims made by certificate and other programs**. Using an extensive development process of a group of advisors and open public comment, standards are developed in five areas: learning, completion rate, placement rate, earnings, and stakeholder satisfaction and confirmation of purpose. The intent is to verify program data through an extensive definition of terms and data metrics, and to work with both accredited and non-accredited programs and institutions. It is currently in the process of finalizing its standards and working to establish a new nonprofit to implement them.
- EducationCounsel has prepared a [risk assessment model](#) for consideration to **simplify the structure of accrediting reviews** and reduce the regulatory burden on those institutions that have consistently met accrediting agency standards and demonstrate successful performance under defined metrics. Under the proposed framework, accreditors would create a differentiated review process based on key data collected by the federal government, such as

completion and loan repayment and default data, along with the institution’s accrediting history, to distinguish those institutions that would be determined to require significantly less monitoring and evaluative review. Lower performing institutions under these metrics would therefore be more frequently monitored and reviewed.

There are numerous initiatives to increase transparency within the credentialing marketplace. These include:

- **Employers are increasingly explicit about the skills their positions require.** The US Chamber of Commerce Foundation also is exploring and piloting a [Talent Pipeline Management Job Registry Service](#) to improve employer communication of hiring requirements, especially competency and credentialing requirements, and how these requirements can be used by credential issuers to close the skills gap. [Microsoft is supporting Skillful](#), an intermediary created by the Markle Foundation, to foster skills-oriented hiring, training and education. Companies such as IBM are developing [badges](#) as part of their sourcing and internal human resource development processes. Clear competency-based frameworks are being developed as the basis for improving credential quality and alignment of credentials. For example,
- [Credential Engine](#) is leading the development of the **web-based “Credential Registry”** that will enable employers, students and workers, educators, state policy makers, and more to have access to real-time information about every credential offered in the U.S.–from the competencies and educational linkages a credential may have to its value in the labor market and status of approval or recognition by a respected authority. Credential Engine is also creating a common credentialing language, the Credential Transparency Description Language (CTDL), based on standards underlying search protocols on the web, in order to enable easier search and comparisons among credentials published in the Registry. Finally, Credential Engine maintains a Registry search engine app called “Workit” with the intent of opening it to public access and to additional customized app development.
- **Connecting Credentials’ beta Credentials Framework** has been piloted tested in a variety of contexts as a reference tool to make it easier for stakeholders to understand the competencies associated with any credential and to compare the value of various credentials and determine which credential best fits their needs. By providing common language and a unified framework for understanding competencies represented by credentials, it has helped users create clearly visible pathways to increase career and economic mobility for historically underserved and underrepresented populations and to support the translation of learning acquired across institutions and between academic institutions and employers.
- Institutions across the U.S. have been **innovating student records to more comprehensively capture student learning inside and beyond the classroom.** Their goal is to help students better articulate their learning and to respond to employer demands for better information. The American Association of Collegiate Registrars and Admission Officers (AACRAO), NASPA – Student Affairs Administrators in Higher Education, and Lumina Foundation have been working with twelve colleges to develop [Comprehensive Student Records \(CSR\)](#), which can be used as models for other institutions to develop locally. These colleges are linking data from multiple sources to capture learning and skills developed inside and outside classroom and presenting this data in different formats. For example, the University of Central Oklahoma Student Transformative Learning Record (STLR) is like a second transcript that records students' growth and [transformative learning](#) through both academic and non-academic experiences.

Students reflect on their experiences, then receive feedback from a trained faculty or staff member. Students store these experiential artifacts in different versions of official records that they can share with potential employers, graduate schools, or others to highlight their most employable strengths. AACRAO and NASPA now working to distill the 12 approaches tested into a smaller number of models to promote greater consistency of approach. [Iowa GROW®](#) (Guided Reflection on Work) and [WIGrow](#) are focused on making student employment a "high-impact activity" - one that requires students to reflect on their learning and connect their learning within and beyond the classroom. They use brief, structured conversations between student employees and their supervisors to help students connect the skills and knowledge they are gaining in the classroom with the work they are doing, and vice versa.

Given how essential evidence is to building trust, stakeholders are searching for innovative ways to provide better information to consumers, employers, and institutions. Innovations on the evidence front include:

- **Digital credentials**, whether comprehensive student records (CSR's), micro-credentials such as badges, or other forms yet to be developed, provide options for communicating new forms of evidence of the attainment and application of learners' knowledge and skills. While a great deal of progress is being made on the technology and data interoperability front, significant challenges remain for assuring the quality of the information being communicated (for example, the reliability and consistency of underlying assessments), demonstrating value for employers and addressing issues related to data ownership and privacy.
- **Data linkage approaches** are being developed that will improve our understanding of the outcomes for students attending different schools and attaining different kinds of credentials. Key stakeholders working collaboratively as members of IMS Global have developed technical standards that when adopted will enable interoperability of supply and demand side data systems and the Credentialing Ecosystem Mapping Team made up a group of leading technical standards organizations spanning K-12, higher education, medical education, military training, and workforce development are aligning their standards to facilitate the transfer of competency data across the continuum of learning and employment. The National Association of Manufacturers is collaborating with the National Student Clearinghouse and the Census Bureau to link data sets and identify the return on investment (ROI) for different kinds of certifications. Launch My Career, developed by the U.S. Chamber of Commerce, is an interactive web tool (currently for [Colorado](#), [Tennessee](#), and [Texas](#)) that provides students with information about the return on investment (ROI) in a certificate or degree from public postsecondary schools, including technical schools and community colleges. The Equality of Opportunity Project leverages student outcomes data for 30 million postsecondary students to construct economic mobility report cards, that include aggregate statistics on earnings and family income for each college in America.

Recommendations

We offer the following recommendations for what federal and state policy-makers, the various members of the diverse credentialing community and funders can do to improve trust in credentials:

1. Employers, educators, quality assurers and governments should join together as co-creators of more agile and sustainable strategies for assuring shared value and reciprocity of trust in the credentialing ecosystem.

Innovations on the supply and demand side point to new more agile and evidence-based approaches for skill development and documenting what people know and are able to do. Yet our separate quality assurance, consumer protection, and data systems have not kept up with the need for a more integrated agile approach. We need a better understanding of how quality is defined and assured by credentialing programs and the third parties that assure their quality is needed to build greater trust in the relevance and value of credentials. With the expansion of providers and credentials, more transparency and reliability of evidence of outcomes is needed from both the providers themselves and quality assurance agencies. What outcomes are promised and delivered by the provider, and are they evaluated by a third party? How reliable is the evidence relied upon? What standards of performance or proficiency are used to determine “quality” for quality assurance by the provider and QA body? How are judgments of quality and the underlying evidence made public or transparent in formats that are understandable and usable by learners, employers, other providers and policy makers? The marketplace has shifted to a focus on outcomes, not inputs; evidence of quality needs to move beyond reputational value to transparent and reliable reporting of outcomes around the skills and qualities needed for the 21st Century workplace.

2. Funders should support new quality assurance entities (and more adaptive approaches by existing quality assurance bodies) that focus on equitable outcomes and assurance that programs deliver stated outcomes with clear metrics of quality. Further, we urge the creation of a common approach to defining and reporting results to build trust in the actions of quality assurance entities.

Quality means different things to different stakeholders. To expand the reach of credentials to meet societal needs, greater innovation is needed in the number and type of providers, and in the assurance that quality outcomes are produced. Trust in credentials requires that quality be assured through improved transparency and evidence. New QA entities are emerging, and they need to be supported to promote the development of new more outcomes-based approaches. Who will review these new entities and assure their independence and effectiveness? Current efforts to bridge nontraditional and traditional programs and institutions, such as the federal [Educational Quality through Innovative Partnerships](#) (EQUIP) program, need to be expanded as well as acceptance by accrediting and QA bodies.

3. Quality assurance bodies that review the entire institution – regional and national accreditors – should be more transparent as to whether and how they review and assure the quality and outcomes of the increasing number and diversity of credentials offered by the institutions they accredit.

Current accrediting standards and processes focus heavily on institutional inputs and processes, along with evidence of assessment of outcomes, without clear standards regarding the levels of student performance. Institutional processes are reviewed but not individual programs. Primary attention is placed on degree programs and less so, if at all, on the many certificates awarded. To

build greater trust in the meaning and value of these credentials, accrediting agencies need to undertake ways to assure that institutions demonstrate the quality and outcomes of these certificates along with degree programs.

4. The credentialing community should develop quality standards for digital micro-credentials so that they can be assessed and valued by employers and contribute to learners' long-term career outcomes.

Digital micro-credentials such as badges are a new way for individuals to demonstrate competency in a subset of skills that are smaller than a traditional educational credential or a usual job description. They can be used as a stand-alone credential or as an add-on to an existing certification, degree or certificate. While a technical [Open Badges standard has been](#) developed to ensure learners can display their badges on any compliant platform, no quality standards have been developed for micro-credentials to ensure their relevance to employers' skill requirements, their "interoperability" with employers' human resources practices or their recognition in education and training systems. Since the use of badges is not yet widespread, there is an opportunity for users and producers of badges to come together to set standards for an end-to-end quality assurance process that includes everything from the assurance of relevance of the competencies for which the badge is being developed to the validity of assessments used to validate competencies and the transparency and evidence of value provided. We recognize the challenge in developing voluntary, but widely-adopted quality standards given the many entrepreneurial players involved in developing micro-credentials and the diversity of contexts in which they are being developed. We offer the following principles to guide development and subsequent adoption of these standards:

- Build on work that has already been done rather than reinvent the wheel. Draw applicable lessons from the development and adoption of end-to-end quality assurance processes in other fields. The IREC case study on development of micro-credentials is one source of such lessons.
- Focus initially on smaller discrete sets of credentials built around common competencies, such as specific occupational credentials or as part of a broader sector strategy. This will allow stakeholders to come more easily to consensus on what standards need to be, and to possibly build off national standards set by certification bodies.
- Micro-credential quality standards need to be developed collaboratively by a range of stakeholders, most importantly employers. The ANSI standard development processes provide guidance on how this could be done.
- Micro-credential quality criteria should include portability and "stackability" so that people can use these credentials as stepping stones toward broader credentials following their own paths over time.
- Careful consideration should be given to how micro-credential quality standards complement other existing standards, not undermine them.

5. Federal and state policy makers should use the levers at their disposal to promote greater trust in credentials.

Public policy has historically played a role in driving trust in postsecondary credentials, particularly through accreditation and regulation. However, public policy has likewise often stifled innovation and undermined trust. It is therefore incumbent on state and federal policy makers to proceed

carefully as they think about the role they play in building trust. The government should whenever possible look to support market-based solutions that drive trust in credentials. With this in mind, we encourage federal and state policy makers to consider taking the following actions:

- **Use federal regulatory authority to encourage integration of certifications into academic programs of study.** We encourage the federal government to recognize private sector consensus standards and allow standards-based certifications to be embedded in academic programs. The upcoming reauthorization of the higher education act is an excellent opportunity to engage in this discussion.
- **Improve federal and state data collection and reporting, and encourage public/private data partnerships to build stronger evidence for the value of credentials.** There are a wide variety of governmental and private sector datasets that touch on important pieces of the credentialing ecosystem. These include data on longitudinal student records, postsecondary institution outcomes, wages and employment, employer demands, costs associated with credential attainment, long-term career outcomes, and regulatory requirements. It is not unusual for these datasets to contain inaccuracies or information gaps that limit their usefulness when utilized in isolation (which is often the case). We encourage federal and state policymakers to encourage the linking of governmental and non-governmental data systems to create a more holistic and accurate overview of the credentialing ecosystem, and use this data to build a stronger body of evidence about the value credentials offer. We likewise encourage policymakers to engage in efforts to improve the accuracy of their own governmental data.
- **Use federal policy to promote greater outcomes-based quality assurance and oversight of innovative certificate, non-degree and degree programs.** The current higher education accreditation process not only serves as a gateway for access to federal student aid, it also serves as a proxy for quality of institutions and credentials. Accredited institutions of higher education and the credentials they provide receive a baseline of trust among employers, students, and the public based on an understanding that a federally-recognized accreditor has signed off on the quality of the institution and the education provided. However, these requirements serve as barriers to entry for new providers of credentials or short-term programs. U.S. Department of Education’s Educational Quality through Innovative Partnerships (EQUIP) program is intended to test the provision of financial aid to new and unaccredited providers of certificate and degree programs through accredited institutions using quality assurance by new quality assurance entities. Assuming the success of current experiments under this program, this approach should be expanded to include eligibility for financial aid for innovative programs not only through accredited institutions, but also independently through new quality assurance entities that have gone through a new title IV recognition process. Such a new recognition process is needed to provide Title IV eligibility for new quality assurance entities that provide outcomes-based and transparent quality assurance for innovative certificate and degree programs.

Conclusion

We’ve identified what we think are the foundational building block for trust: quality, evidence and transparency; and we’ve identified promising initiatives by leading-edge employers, educators, government in each of the domains for building trust. Yet, there are many unanswered questions:

- How can we build on, refine and ultimately scale and sustain these innovations across the decentralized public-private ecosystem?
- What are employers' and educators' responsibilities as users and providers of credentials, and the learning opportunities that lead to those credentials?
- What greater synergy could be accomplished through further cross-fertilization of approaches?
- How can technology enable and support innovations in improving transparency, evidence and quality?

We urge associations representing the multiple credentialing stakeholders to foster engagement among their members in continuing dialogue and experimentation to grapple with these questions at all levels. We urge innovators in all sectors to build evidence of the value of their products and services for employers and for individuals, recognizing the diversity of needs and priorities within each group. We urge public and private sector quality assurers to be more transparent in their processes. We urge funders whether in government, the private sector or the philanthropic community to foster innovation and partnerships focused on building trust through incentives, flexibility and support.

APPENDIX

Workgroup Participants*

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** Participation in workgroup deliberations doesn't imply that the individuals listed or their organizations necessarily endorse any or all of the workgroup recommendations.*