The Workforce Innovation and Opportunity Act (WIOA) Research Portfolio

A Research Evidence Scan of Key Strategies Related to WIOA

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I. Introduction

Ongoing research and evaluation that produce actionable, widely disseminated evidence are central to the continuous improvement of U.S. Department of Labor (DOL) programs. In addition, the Workforce Innovation and Opportunity Act of 2014 (WIOA) requires DOL to conduct periodic, independent evaluations to inform the effective operation of WIOA programs and services. To support the development of DOL's research portfolio, this scan examines existing evidence on key topics related to WIOA programs and services.[1]

The scan focuses on four main topic areas, selected through a series of discussions with DOL's Chief Evaluation Office, Employment and Training Administration (ETA), and other DOL staff: **case management, integrated service delivery, training programs**, and **youth services**. Although the first three sections on service strategies focus on evidence from studies on adults or general populations, these services also relate to programs serving youth. However, because of the policy importance of identifying effective strategies for disconnected youth ages 16 to 24, we devote the final section to research on youth, focusing on the many strategies offered by the WIOA Youth program.

These topic areas were selected because they are viewed as critical to the success of job seekers and employers, and because they include interventions that offer the potential to be rigorously evaluated. The brief describes strategies associated with each of the four topic areas, discusses existing evidence on the effectiveness of those strategies and evaluations currently under way, and summarizes the knowledge gaps in the existing evidence base. Our scan prioritizes studies of strategies used in WIOA and by partner programs, but it also incorporates studies on related programs to increase the pool of studies from which to draw evidence.

II. Approach to research evidence scan

Several foundational sources were used to identify the studies included in this brief. First, we drew upon large-scale studies on the Workforce Investment Act (WIA), WIOA, and American Job Centers (AJCs). The WIA Gold Standard Evaluation (Fortson et al. 2017) includes an impact and implementation analysis, whereas the Institutional Analysis of AJCs (Holcomb et al. 2018) and the WIOA Implementation Study (Sattar et al. 2020) were not rigorously tested and do not include an analysis of impacts. Second, we searched two workforce development research clearinghouses: the Clearinghouse for Labor Evaluation and Research (CLEAR)—specifically, for the reviews of apprenticeship and work-based training, opportunities for youth, and entrepreneurship and self-employment topic areas; and the Pathways to Work Evidence Clearinghouse, focusing on studies on coaching and career navigation.

In addition, we also incorporated reviews that Mathematica previously conducted for DOL on (1) Job Corps (Berk et al. 2018), (2) the Reentry Employment Opportunities Evaluation (Lacoe and Betesh 2019), and (3) the Trade Adjustment Assistance (TAA) Behavioral Intervention and Long-Term Design Project (Goger et al. forthcoming). Finally, to expand on the literature covered in these reviews, we conducted a targeted literature search using terms based on the selected topics of interest in Google Scholar and Google from the websites of policy research firms with experience in workforce policy and from the ETA publications database.

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[1] This research evidence scan is one of a pair of reports developed as part of DOL's WIOA Research Portfolio project. The companion report is "A Scan of Key Trends in the Labor Market and Workforce Development System" (Mack and Dunham 2021).

To identify a broad set of potentially promising strategies, we also incorporated studies on programs administered outside of WIOA, such as the Temporary Assistance for Needy Families (TANF) program administered by the HHS Administration for Children and Families or the Disability Program Navigator initiative administered by the Social Security Administration. Furthermore, this scan is not limited to studies that meet any particular evidence standard or other specific criteria, as would occur in a systematic evidence review for CLEAR or other clearinghouses. However, we do place greater emphasis on studies that used randomized controlled trial (RCT) and other rigorous designs. The scan also includes studies that found no statistically significant impacts of the strategy in question and discusses strategies that have used less rigorous evaluation designs. Finally, in synthesizing the available evidence, we highlight knowledge gaps where more evidence is needed. The knowledge gaps primarily focus on questions that could be answered by impact studies, though we also include questions that might be addressed by implementation research that could support such impact studies.

In sum, the aim of this scan is to generate ideas on promising workforce development strategies that could be rigorously evaluated in the WIOA context. The scan casts a wide net to identify such strategies. It is not a formal evidence review using an established protocol.

III. Case management

Case management, broadly defined, is one-on-one assistance or individual counseling focused on providing supports and information to assist individuals with immediate and long-term goal achievement. Under WIOA, this type of individualized assistance is one of several activities under the umbrella of Individualized Career Services (see Box 1). Case management often occurs before employment, and sessions include activities such as career planning, skills and needs assessments, job search assistance, and referrals for supportive services. The way in which these services are delivered and the involvement of program staff—sometimes referred to as employment counselors, coaches, career advisors or case workers—can impact participant success. Case management services are also a critical component of programs funded by WIOA Youth, but the services offered by these programs generally differ from those provided to adults and are discussed in the youth services section.

The most direct and rigorous evidence on the effectiveness of WIOA-supported case management comes from the WIA Gold Standard Evaluation, a nationally representative RCT study on the Adult and Dislocated Worker programs (Fortson et al. 2017). It found that job seekers assigned to receive intensive services—assistance through one-on-one counseling and workshops—achieved higher employment and earnings than those with access only to self-service resources. The intensive services group had earnings that were approximately $3,300 higher across 36 months than the self-services group—more than the costs of providing these services—and those receiving intensive services were more likely

Box 1. Individualized career services under the WIOA Adult and Dislocated Worker programs

- Comprehensive and specialized assessments of the skill levels and service needs
- Development of an individual employment plan
- Group or individual counseling
- Career planning
- Short-term pre-vocational services
- Internships and work experiences
- Workforce preparation activities
- Financial literacy services
- Out-of-area job search assistance and relocation assistance
- English-language acquisition and integrated education and training programs

Source: 20 CFR 678.430

to be in jobs that offered fringe benefits. In another RCT study of models for delivering individual training accounts, participants randomly assigned to receive more intensive counseling on their choice of training had higher earnings in the follow-up period, which ranged from six to eight years following random assignment. This group also received training accounts that were approximately $1,800 dollars higher, on average; in addition, the more directive counseling they were supposed to receive was generally not delivered as planned (Perez-Johnson et al. 2011).

A. Models of case management

The ways in which case management is delivered can vary and be tailored to meet the needs of participants. Examples of different models of case management delivery and approaches can be identified across sectors, with promising strategies showing potential for job seekers. These include coaching models (drawn primarily from TANF programs with a focus on employment goals), intrusive advising (or proactive outreach to students to provide support and additional services) and navigator models (sometimes used with TAA participants), and strengths-based models (for supporting individuals with significant barriers). Overall, there has not been substantial research on how case management is administered and practiced in WIOA programs.

For heuristic purposes, we describe case management models as distinct approaches. However, these are not mutually exclusive; for instance, coaching and navigator models may include strengths-based strategies for working with program participants. We provide examples to illustrate the differences in service delivery and the environments in which these approaches have been applied. Some models have roots in areas beyond workforce development, such as social services and rehabilitation settings, but promising aspects of these models could be applied to counseling and case management approaches within WIOA and other workforce programs.

1. Coaching models

In coaching models, staff work collaboratively with participants in a nondirective way to identify their goals and support their progress toward goal achievement. Unlike many case management approaches where staff set goals for participants and define what actions need to be taken to meet those goals, coaches act as a partner to support and motivate participants (see Box 2 for more detail on these models; Joyce and McConnell 2019). Coaching models have been used in a few WIOA programs and increasingly to engage with and support TANF program participants to improve employment and earnings outcomes, which makes these models especially applicable for expanded use with WIOA programs and services.

Only a few studies have investigated coaching models, and the impacts have been mixed. The Mobility Mentoring model aims to help individuals attain and preserve economic independence by using goal setting, action plans, earned incentives, recognition, and self-belief and awareness (Babcock 2018). The Washington State Department of Early Learning piloted this model for parents of children attending Head Start. In an evaluation of this pilot, parents receiving Mobility Mentoring had higher earnings than those in a comparison group that did not receive Mobility Mentoring services (Babcock 2018). The Michigan Goal Progress approach, an approach focused on TANF applicants and recipients, focuses on identifying employment-related goals and breaking them down into actionable steps. However, an RCT found that the program did not have statistically significant impacts on employment, earnings, or public benefit receipt (Martinson et al. 2020). Additional coaching models focusing on TANF recipients, including the human services coaching model that has also been used in some WIOA programs, are discussed in Box 2.

2. Intrusive advising

Often applied in an academic setting, intrusive advising involves advisors proactively engaging with students and encouraging them to be participants in the advising process, as opposed to being reactive and responding only to students' requests for assistance. This model sometimes requires students to maintain attendance in advising sessions as a condition of enrollment in their academic program (Rajecki and Lauer 2007; Donaldson et al. 2016). In a workforce setting, a similar approach could include proactive outreach by case managers to provide career services to job seekers. In instances where a WIOA participant is also enrolled in a training program or where the AJC is co-located with a community college, for example, intrusive advising could be combined with services offered under WIOA.

Box 2. Additional coaching models for TANF participants

Derr and Joyce (2020) describe a set of coaching models from the TANF literature that are currently being evaluated:

Goal4 It!™ This model focuses on moving from compliance-driven interactions to engaging, meaningful exchanges with participants to support and motivate them toward change. The model uses four steps—Goal, Plan, Do, Review/Revise—aimed at improving outcomes for children and families. It uses three main strategies: (1) reducing sources of stress, (2) strengthening life skills, and (3) forming relationships within and beyond the program. This model is currently included in the [Evaluation of Employment Coaching for TANF and Related Populations](#).

MyGoals for Employment Success (MyGoals). The MyGoals model is built on a sustained, three-year relationship between staff and the participant, focusing on helping participants achieve their goals by addressing challenges in executive functioning skills—the mental skills needed to complete tasks such as emotional control, stress tolerance, and time management (Riccio and Castells 2020). This model is currently included in the [Evaluation of Employment Coaching for TANF and Related Populations](#).

Family-centered coaching. The objective of this model is to support families holistically as they move toward goal achievement and economic prosperity. This includes a family-led and strengths-based approach with seven areas of focus: (1) child well-being and parenting; (2) employment, education, and career; (3) legal assistance; (4) financial assistance; (5) health and well-being; (6) family, friends, and relationships; and (7) basic needs—food, housing, transportation, and safety (Derr and Joyce 2020).

Human services coaching. This model focuses on helping participants identify goals and drive motivation. Specifically, staff assist participants to direct, own, and experience the changes they want to see in their lives. Its core principles are to be person-centered, relationship-based, and goal-driven.

Two additional coaching models are also included in the ongoing [Evaluation of Employment Coaching for TANF and Related Populations:](#)

Family Development and Self-Sufficiency (FaDSS). Administered by the Iowa Department of Human Rights, FaDSS focuses on assisting families at risk of long-term welfare receipt. This approach includes goal setting and ongoing support from a coach, all through a home visiting approach. Coaches conduct at least two home visits during the first three months of participation, followed by visits as needed with a minimum of one visit per month (Moore et al. 2019).

LIFT. Based in New York City, Chicago, and Los Angeles, LIFT focuses on long-term financial goals of participants, such as a home purchase or college savings for a child. Coaches work with participants to set short- and long-term goals and identify milestones toward achieving those goals. As they move forward with their goals and complete a "three-month goal cycle," participants can receive financial payments in the amount of $150, totaling up to $1,000 over a two-year period (Moore et al. 2019).

Several RCTs have found that intrusive advising models improve degree completion among women (Evans et al. 2017), academic success (Abelman and Molina 2001; Kirk-Kuwaye and Nishida 2001), and

retention (Abelman and Molina 2001). In Jeschke et al. (2001), students who received intrusive advising as part of an RCT expressed a higher level of satisfaction with advising and more connectedness with the department, compared to participants in the control group that received traditional advising (such as regular but infrequent meetings on course selection). From a qualitative study of student opinions of intrusive advising, Donaldson et al. (2016) found that benefits of intrusive advising in an academic setting included greater participation in degree planning, increased relationship building with their advisor, and increased feelings of individualized support on the part of students.

Intrusive advising has also been used as part of some Trade Adjustment Assistance Community College and Career Training (TAACCCT) programs. Cosgrove et al. (2019) conducted a regression analysis of student data from Missouri's Manufacturing Workforce Innovation Network, a stackable credential program that included intrusive advising and supports for adult students. In this study, students who received intrusive advising were more likely to complete the program and receive a certificate. A quasi-experimental design (QED) study of another TAACCCT program, the Michigan Coalition for Advanced Manufacturing, also found that intrusive advising was associated with an increase in the likelihood of obtaining a nondegree credential for this same population of adult learners (Negoita 2019).

3. Navigator models

A career navigator provides guidance in assessing career interests, understanding various steps to pursue a selected career, developing training plans, and guiding participants toward appropriate services offered by partner and other programs (Center for Law and Social Policy 2016).[2] Although WIOA Youth programs include career navigators as a key service, this section focuses on evidence about programs for adults or general populations. Two examples of navigator models for adult populations include those implemented in academic settings as part of the TAACCCT programs and the Disability Program Navigator (DPN) initiative. In a number of quasi-experimental studies of the TAACCCT programs, students in an academic program receiving career navigation and supportive services were compared to a group of students who were in similar programs but were not offered these services. These studies found mixed evidence on the effects of career navigation and supportive services on the likelihood of employment and earnings (Jensen et al. 2016; Price et al. 2018; Dauphinee and Bishwakarma 2018; Maxwell et al. 2017; Rayyes et al. 2016). In the DPN initiative, navigator staff (themselves known as DPNs) assist individuals with disabilities seeking employment services within local AJCs (then referred to as One-Stop Career Centers), with the ultimate goal of improving employment outcomes for people with disabilities (Livermore and Colman 2010).

A descriptive study of the DPN model found that AJCs serve a large proportion of individuals receiving Social Security Administration (SSA) disability benefits and that SSA recipients who used DPN services had positive employment outcomes (Livermore and Colman 2010). Some state workforce agencies use TAA Navigators to guide participants through the benefits and training provided by TAA, but this strategy has not yet been evaluated within that program.

4. Strengths-based models

Strengths-based models, used in many settings including when working with individuals with significant challenges to employment, focus on the overall strengths of individual program participants and encourage self-efficacy in receipt of services (Brun and Rapp 2001). Prior studies of the effectiveness of

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[2] Where career navigators are discussed in relation to WIOA services, this title appears to be synonymous with caseworker or counselor.

this model for individuals with serious mental health challenges have found positive effects in multiple areas, including employment, independent living, and reduced hospitalizations (Rapp and Sullivan 2014).

B. Post-employment counseling

WIOA programs, including programs supported by WIOA Youth, offer follow-up services that may include post-employment counseling. In instances where participants obtain employment, post-employment counseling may help support their transition to and ongoing success in their new position. These approaches may incorporate strategies from one or more of the case management models discussed previously. Although models that include post-employment counseling have been rigorously evaluated (several of them are discussed below), there is no clear evidence on the independent impact of post-employment counseling, separate from the effects of training or subsidized employment. The following are three examples of workforce development programs that include a post-employment counseling component:

The Work Plus program, focused on TANF recipients as part of the Employment Retention and Advancement project, offered post-employment job supports and intensive case management to help participants find and retain employment. Although this program supported TANF recipients, the strategies it used are inherently workforce development strategies that could be applied to WIOA programs. The authors conducted an RCT in which participants were assigned to the treatment group (to receive employment services through Work Plus) or the control group (to receive standard TANF services). Evidence suggests that there were no statistically significant effects on employment or earnings for Work Plus participants as compared to the control group (Navarro et al. 2007; U.S. Department of Labor 2016).

The WorkAdvance program provided training and employment services to low-income adults to improve employment outcomes and meet the needs of local employers. The program included five main elements: screening of potential participants before enrollment, work-readiness services (for example, career coaching, supportive services), occupational training, job development and placement, and follow-up retention service coordinated with employers (U.S. Department of Health and Human Services 2020a; Hendra et al. 2016; Schaberg 2020; Tessler 2013; Tessler et al. 2014). Although the program overall demonstrated positive short- and long-term impacts, the evaluations were not designed to assess the effectiveness of the post-employment counseling component independently.

The Good Transitions program, focused on low-income, noncustodial parents, placed participants into subsidized employment while providing job coaching, job development, and case management. After one month, participants were placed into a different position, with less coaching but continued case management and job development support. In an RCT of this program, Good Transitions program participants had increased short- and long-term earnings, increased employment, increased education and training completion, and decreased public benefit receipt compared to individuals in a control group who did not receive Good Transitions program services but could participate in other services from the Division of Child Support Services' Fatherhood Program (U.S. Department of Health and Human Services 2020b; Barden et al. 2018; Bloom 2015; Fink 2018; Redcross et al. 2016). Again, however, further research is needed to understand the independent effects of counseling and case management, as distinct from the effects of subsidized employment.

The Individual Placement and Support (IPS) model, in addition to job search assistance and a range of other services, also includes post-employment support. IPS is an approach to supported employment,

often applied in the vocational rehabilitation realm for individuals with significant challenges to employment, such as serious mental illness. IPS focuses on integrating vocational and treatment services, with the core principles focusing on competitive employment, systematic job development, rapid job search, integrated services, benefits planning, zero exclusion, time-limited supports, and worker preferences (IPS Employment Center 2021). Receipt of IPS has generally been shown to result in higher rates of competitive employment, more days worked, and greater earnings over the same period of time as compared to nonparticipants or those who received a limited range of services (Rosenheck and Mares 2007; Bond et al. 2015; LePage et al. 2016; Ottomanelli 2012; Davis et al. 2012; Twamley et al. 2008).

Much of the research on IPS programs focuses on IPS services provided to people with serious mental illnesses, but the model has been used in different settings, such as in TANF and workforce settings. However, the findings from these studies have been mixed. In a study of an IPS model provided to TANF recipients with physical and mental disabilities, those who received the IPS services had higher rates of competitive employment and earned more on average than the control group during the first year of follow-up (Farrell et al. 2013). In another study of IPS used in California's TANF program, employment rates increased three times as much as the rates of those who received other mental health services offered by the agency (Chandler 2017). However, an RCT study of an IPS program delivered by San Diego County's Workforce Investment Board found that those in the control group achieved higher rates of employment than those who received the IPS program services (Freedman et al. 2019).

C. Knowledge gaps related to case management

Some evidence, such as the WIA Gold Standard Evaluation, suggests that the receipt of case management can improve employment and earnings in a workforce development setting, though a number of related strategies have less of an evidence base. However, little is known about which services or elements of case management are responsible for positive impacts. In addition, this review did not find any evidence on the efficacy of various assessments at identifying interests, strengths, and challenges. Specific gaps in the current literature include the following:

What case management models are currently in use in WIOA programs and services? What additional case management models could be applied to serving job seekers in WIOA programs?

What are the most effective case management models, and in what settings? What activities should be included during case management sessions? What strategies are most successful for providing case management (for example, dosage and format of case management sessions)?

How does the administration of case management models vary by state and locality, such as the availability of one-on-one services, time spent with counselors, level of intensity of counseling sessions, and specific types of services? How does that variation impact participant outcomes?

Could navigator, coaching, intrusive advising, strengths-based, or trauma-informed models developed in contexts outside of WIOA be effective for WIOA participants? Which models would be most effective? In which situations?

What is the independent effect of case management or one-on-one counseling, either pre- or post-employment, both generally and in the context of WIOA programs? In terms of post-employment, does the level of coordination between counseling staff and employers impact the effectiveness of post-employment counseling?

Are there particular models for the training of case managers that lead to more effective case management? Are there particular qualifications or characteristics that lead to more effective case managers?

How effective are assessments in assessing skills and aptitudes and identifying employment challenges and career interests? What are the most effective assessments?

IV. Integrated service delivery

Creating more closely integrated services across programs has been an important principle of WIOA, as well as the goal of many recent initiatives aimed at generating efficiencies and reducing challenges in reaching self-sufficiency for individuals and families (U.S. Department of Labor 2021). Under WIOA, the One Workforce approach aims to create "greater collaboration, integrated service delivery, shared data, and leveraged resources that leads to positive employment and training outcomes for customers" (U.S. Department of Labor 2021). Integration of services and programs can impact all areas of operations, including case management approaches, training, staffing, funding, and administration. Additionally, integration aims to reduce siloing, or separation and isolation, of programs and services, thus supporting increased access and improved efficiencies. Conceptually, integrated service delivery applies to all WIOA programs and populations, including WIOA Youth programs. Although some of the evidence in this section discusses programs for adults or parents, two key studies—the Institutional Analysis of AJCs and the WIOA Implementation Study—focused on system operations, where those systems implement programs for both adults and youth.

Integration could also help participants get benefits and services they are eligible for. For example, a family in need of assistance through the Temporary Assistance for Needy Families (TANF) program might receive contact information for the local TANF agency; however, the family may be responsible for initiating the process, including contacting the agency and applying for services. In an integrated model, WIOA staff may be co-located with TANF staff, the referral process could happen in real time (for example, following a career-focused counseling session, the family can immediately meet with TANF staff on-site), and coordination between the agencies may include cross-program integrated application and eligibility determination. This integrated approach, implemented through AJCs, is intended to help participants get served in a more holistic way, increasing the likelihood that their specialized needs are being met, breaking down barriers to obtaining additional services, and increasing their chances of successfully pursuing their educational and career goals. However, there have been few rigorous impact studies that aim to identify the effects of integrating services.[3]

A. Strategies that aim to enhance co-enrollment and coordination among WIOA programs

As of 2018, many AJCs had implemented strategies that do not require larger structural or policy modifications, such as co-location (at least part-time) among multiple partners, AJC-wide staff meetings, staff cross-training, coordinated outreach activities, and a streamlined intake process for program

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[3] There are some studies of integrated services from human services agencies. In a study focused on integrating TANF services with mental health supports in Minnesota, in most sites, participants served after the integration initiative was implemented did not have better employment or earnings outcomes than those served before, after adjusting for other characteristics (Martinson et al. 2009). The Assessing Models of Coordinated Services for Low-Income Children and Families study is currently exploring further integrated services strategies (U.S. Department of Health and Human Services 2020c).

participants (Holcomb et al. 2018). Although these strategies have not been subject to rigorous evaluation, we describe them and their evidence base below.

Co-location, consolidating administrative structures, and cross-training. The U.S. Government Accountability Office (GAO 2011) identified both co-location (that is, being located within the same building or facility) and consolidating administrative structures as ways to increase efficiency and improve coordination. At the agency level, 14 states consolidated core WIOA programs under a single agency, thus reducing or removing barriers to coordination. Additionally, in an implementation study by English and Holcomb (2020), the 14 states said the collaboration that occurred between core agencies during development of the state plan facilitated ongoing communication between these agencies and individual staff members. Finally, states noted opportunities for ongoing cross-training of staff across Title I programs (English and Holcomb 2020). GAO (2011) also notes that in three states where the welfare and workforce agencies have been consolidated—Florida, Texas, and Utah—state officials described realizing reduced costs and improved services.

Box 3. WIOA partner programs

WIOA core programs
- Title I: WIOA Adult, Dislocated Worker, and Youth
- Title II: Adult Basic Education and Literacy
- Title III: Wagner-Peyser Employment Service
- Title IV: Vocational Rehabilitation

WIOA required partners
- Department of Labor: Job Corps, YouthBuild, Indian
- and Native American programs, National Farmworker Jobs Program, Senior Community Services Employment Program, TAA, Unemployment Insurance, Jobs for Veterans State Grants, and Reentry Employment Opportunities
- Department of Education: Carl D. Perkins Career and
- Technical Education programs
- Department of Housing and Urban Development: Employment and training programs
- Department of Health and Human Services: Community Services Block Grant employment and training programs and TANF (newly added required partner under WIOA)

Other optional partners (not exhaustive)
- Social Security Administration: Ticket to Work
- Department of Agriculture: SNAP Employment and Training and Able-Bodied Adults Without Dependents
- Corporation for National and Community Service: AmeriCorps
- Other appropriate government or private sector programs, such as libraries and child care providers

Source: WIOA Sec. 121(b)

At the local level, the emphasis on co-location, as well as alignment and program coordination under WIOA, enabled partners to work together and streamline services (Dunham et al. 2020). Local AJC staff note that co-location was needed in order to implement a functional staffing model (where staff complete tasks based on function as opposed to employer) or hybrid model (a combination of the functional model and the specialized staffing model, where staff have specific responsibilities that do not overlap; Koller and Paprocki 2015). Additionally, co-location allowed for greater coordination between staff and a stronger referral process (Koller and Paprocki 2015). Co-location across AJCs in the WIA Gold Standard Evaluation varied, with some local areas having a different mix of partners co-located at the AJC. For example, Wagner-Peyser Employment Service (ES) was co-located in 27 AJCs, Senior Community Services Employment Program (SCSEP) in 16 AJCs, and Job Corps in 12 AJCs; additionally, some states require certain partners to be co-located within each AJC, such as WIA, ES, Veteran's Employment and Training Service (VETS), Adult Education, and Vocational Rehabilitation (Koller and Paprocki 2015). In an earlier study, GAO (2011) found the benefits of co-location and consolidating administrative structures included reduced administrative costs and, therefore, the freeing of these funds for other uses, such as training additional customers.

The way in which AJC staff are organized also play a key role in coordination between programs. One-quarter of AJCs had WIA or ES staff conduct initial customer intake and enrollment, resulting in functional alignment of these activities across programs or operating agencies (D'Amico 2015). Holcomb et al. (2018) note that most AJCs included in the Institutional Analysis of American Job Centers continued to be organized by program, rather than by function. ETA encourages states to cross-train staff in ES, WIOA, and the Trade Adjustment Assistance (TAA) programs (U.S. Department of Labor 2020).

Durham et al. (2019) describe three models of coordination between WIOA, child care, and other related programs. In the least integrated model, the parallel model, states operate WIOA, Child Care and Development Funds (CCDF), and other related programs from different agencies. Parents in WIOA training programs may receive priority of service for child care access. In the collaborative model, states continue to operate programs in separate agencies but aim to maximize coordination between these agencies through active communication. At the greatest level of coordination, the integrated model, states bring all related workforce development and supportive services programs within a single agency. For example, the Texas Workforce Commission operates all six WIOA core programs, CCDF, TANF, and SNAP programs, and a single division develops and disseminates workforce development- and child care-related policies.

Shared data and data systems. ETA encourages states to consider implementing integrated case management data systems across WIOA partner programs (U.S. Department of Labor 2020), and some research supports data-sharing policies to increase participants' access to different benefits (Adams and Spaulding 2018; Durham et al. 2019). Koller and Paprocki (2015) note the benefits of shared data systems between partners within AJCs include reducing burden related to data entry and increased ability to track services provided to customers across other programs. Many AJC operators and managers do not have access to data from partner programs; partners operating different programs frequently do so with separate performance measures and data systems (Dunham et al. 2020). Similarly, program staff often lack cross-system access and, as a result, must complete data entry into multiple systems. In these instances, staff frequently used work-around methods to address these limitations, such as documenting customer information in spreadsheets (Holcomb et al. 2018).

Pooled funding and cost sharing. Under WIOA, AJC partners must contribute to infrastructure costs, whether or not they are co-located. As of 2018, this was not the practice in many AJCs, and the expectation for contributing toward infrastructure costs corresponded directly with co-location (Brown and Holcomb 2018). Further, many partnerships used informal resource-sharing agreements (Holcomb et al. 2018). Holcomb et al. (2018) note, however, that although there may be resistance to formalizing these arrangements, these approaches may also solidify commitment among partners and encourage a greater presence within the AJC. Most recently, English and Holcomb (2020) found that, of the AJCs included in the WIOA Implementation Study, the memorandum of understanding documents and infrastructure funding agreements required under WIOA have increased the number of partners making financial contributions to the AJCs. However, co-location between partners did not change substantially, partners faced resource constraints that limited their ability to enter into such agreements, and establishing these agreements resulted in increased administrative burden (English and Osborn 2018).

B. Effectiveness of supportive services provided by partner programs

One of the primary ways integrated services could potentially improve participant outcomes is by connecting job seekers to the benefits and supportive services they are eligible for. Under WIOA, supportive services may include linkages to community services; assistance with transportation, child

care, or housing; needs-related payments, assistance with educational testing, accommodations for individuals with disabilities; legal aid services; referrals for health care; and assistance with work-related supplies (such as uniforms), educational items (such as textbooks and school supplies), and payments for employment- and training-related applications, tests, and certifications (20 CFR § 680.900). Many of these services are available on-site (at the AJC) or through referral to a partner program located outside of the AJC. However, McCutcheon and Mastri (2015) found that AJCs use only about 3 percent of their funds on supportive services. WIOA Youth also funds supportive services, though programs delivering these services specifically to youth are discussed in the youth services section.

There have not been many rigorous evaluations of supportive services, which may reflect some challenges in evaluating them rigorously. "Supportive services" does not imply any single bundle of services because it is a set of supports that are available as needed. For example, for a participant who has children, the intervention may be child care, but for someone without a vehicle, it will likely be assistance with transportation, such as a bus pass. In a quasi-experimental study, among older workers, those in Workforce Investment Areas with a higher rate of providing supportive services (except needs-related payments) also entered the workforce at a higher rate (Zhang 2011). Several reviews of the existing literature suggest that participants receiving supportive services, in combination with technical training and case management, have more positive employment and earnings outcomes compared to groups that do not receive such services (Davis et al. 2013; Gueron and Hamilton 2002; Maguire et al. 2010; U.S. Department of Labor et al. 2014). However, little is known about the independent effect of these services.

C. Knowledge gaps related to integrated service delivery

There have been a number of efforts and strategies implemented to improve integration of workforce services—many documented in implementation and descriptive studies—but there is limited rigorous evidence on the effect of integrated services that are closely related to WIOA. There may be challenges with implementing a rigorous evaluation of integrated services models or programs. In particular, integrated services is inherently a system-level intervention, making it challenging to compare groups of participants who are in the same system and are thus facing similar labor market conditions. One of the purposes of integrating services is to allow participants to more easily access additional needed services, but there is limited evidence on the impact of these services.

Specific gaps in the current literature include the following:

- Is service integration an effective strategy for improving outcomes of program participants? Which aspects of integration are effective at meeting goals of an integrated approach, such as reducing barriers for participants or increasing access to partner programs?

- What is the level and type of integration seen at the state and local levels among WIOA programs? Does state-level coordination impact local-level service delivery, and if so, how?

- For integrated services delivered in other contexts, what aspects of service delivery could be applied to WIOA?

- Which aspects of WIOA, including service delivery strategies, would benefit most from integrating services? Are certain aspects or strategies more challenging or costly to integrate?

- What populations served under WIOA would benefit most from receiving services under an integrated approach?

- Does increased availability and access to supportive services (both additional types of services and expanded funding for these services) impact employment and earnings outcomes for job seekers?

V. Training models

The most rigorous study of the federal workforce development legislation and related programs was an RCT conducted as part of the WIA Gold Standard Evaluation, which focused on the predecessor to WIOA. Although not conclusive, the study found that training funded by the Adult and Dislocated Worker programs did not have positive impacts in the 30 months after study enrollment. The inconclusive results could be explained by various factors such as low take-up of WIA-funded training in the treatment group and the control group receiving non-WIA-funded training (Fortson et al. 2017). In an older RCT study on the Job Training Partnership Act, the predecessor of WIA, trainees earned $2,598 more, on average, than those who did not receive program services two years after program completion (Nudelman 2000).

A number of quasi-experimental studies of programs providing training to low-income adults, implemented under WIA, have demonstrated small but statistically significant impacts on earnings and employment. Such impacts have been documented in the short term (less than a year, McEntaffer 2015) and for 12 calendar quarters following WIA registration (Andersson et al. 2013; Heinrich et al. 2009; Hollenbeck 2009). Other studies have found that employment impacts decay over time (Greenberg et al. 2003; Bloom et al. 1997). Studies examining impacts for subgroups have observed that earnings impacts are generally more positive for adult women than men (for example, D'Amico 2006) and might vary with the type of training received. For example, classroom training tailored to specific occupational skills and on-the-job and employer-provided training were found to be more effective than occupational skills training programs without those components (D'Amico and Salzman 2004).

In the remainder of this section, we discuss the evidence base on different types of training programs and models utilized by the public workforce system, such as work-based, classroom-based, and others. Training provided through WIOA Youth programs is discussed in the next section. That said, a number of strategies discussed here are relevant to training programs for youth, and young adults are provided training in most of the programs and models discussed in this section.

A. Work-based learning

Work-based learning program models, also referred to as "earn and learn" models, provide participants with opportunities to apply general skills related to holding a job in a real-world setting. Work-based learning programs may be paid or unpaid, and they may or may not include a commitment from an employer partner to hire participants after completing the training component or be offered to people while they are in training (Heinrich et al. 2009). Common examples include apprenticeship, on-the-job training, paid internships, "returnships," and other earn-and-learn strategies.[4]

1. Apprenticeships

Apprenticeship models involve an industry- and employer-driven structured approach to occupational training. Apprenticeship models typically combine paid, work-based learning; on-the-job training and mentorship; related technical instruction, often provided in a classroom setting; and an industry-recognized credential upon completion. Apprentices are paid, productive employees of an employer that

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[4] The majority of the evidence on internships is on those provided to youth and is discussed in a later section.

sponsors or partners with the apprenticeship program. Apprenticeship has long been dominated by the construction trades, and the existing evidence has largely been focused in these trades. However, DOL and state apprenticeship offices have recently focused on expanding apprenticeship programs in sectors with high demand for skilled workers, most notably health care, information technology, and advanced manufacturing.

Although the evidence base for apprenticeship programs is limited, there is evidence of registered apprenticeship programs improving the earnings outcomes of program participants. For example, a QED study of a registered apprenticeship program found that employment rates were 8.6 percentage points higher and average annual earnings were $6,595 higher for those who participated in the registered apprenticeship than those who did not (Reed et al. 2012). In another QED study of a registered apprenticeship program in Washington State, those who participated in the apprenticeship program earned $3,500 more in quarterly earnings compared to non-apprentices (Hollenbeck and Huang 2016). The Apprenticeship Evidence-Building Portfolio, a large, national QED impact study of apprenticeship programs funded by DOL, is currently underway.[5]

2. Transitional employment

Transitional jobs, also referred to as subsidized jobs, are a form of earn-and-learn employment program that provide participants with work experience and help them find employment by paying all or some of their wages. Transitional employment programs are not always included with other work-based learning models, because these programs offer a mix of strategies. For example, some transitional employment programs provide only work-based income support, whereas others aim to improve future employability by addressing employment-related barriers such as educational attainment and vocational skills. Transitional employment programs may often provide classroom training, job search assistance, and basic education services. They may also conduct job readiness assessments and tailor services based on career interests or by allowing participants to explore different vocational training opportunities (Sattar 2010).

Although a few studies of transitional and subsidized employment programs have demonstrated positive long-term earnings and employment impacts, the literature overwhelmingly suggests that the impacts of such programs are mostly observed during the period of the transitional job placement and fade afterward (Bloom 2014; Butler et al. 2012; Cook et al. 2015; Fontaine et al. 2015; Glosser et al. 2016; Jacobs 2012; Redcross et al. 2016; Roder and Elliot 2012; Rotz et al. 2015; Uggen 2000; Walter et al. 2017).

One RCT study examined the Personal Roads to Individual Development and Employment (PRIDE), which provided employment services to participants while also taking into account their medical conditions when assigning them to activities. The study found large and significant impacts on earnings and employment during the first year after random assignment and an impact of 4 percentage points on employment during the ninth quarter after random assignment (Bloom et al. 2007). Another RCT examined the Enhanced Transitional Jobs Demonstration (ETJD)—here, the program increased participants' earnings and employment rates 30 months after enrollment, when most participants had left their transitional jobs. The enhanced transitional jobs programs served people recently released from prison or unemployed non-custodial parents who had fallen behind in child support payments (Barden et al. 2018). Finally, Cummings and Bloom (2020) synthesized the findings from RCTs of 13 subsidized employment programs that were part of the Health and Human Services (HHS) Subsidized and

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[5] Other apprenticeship studies under way include the following: Impact Evaluation of Teacher Residency Programs and the Rural Youth Apprenticeship Development Project, Expanding Apprenticeship Pathways for Youth and Adults with Disabilities, and the California Apprenticeship Initiative Technical Assistance and Evaluation.

Transitional Employment Demonstration (STED) and the ETJD. About half of the 13 programs demonstrated improved employment and earnings impacts through the second year after study enrollment, and four programs sustained earnings improvements beyond the second year (Cummings and Bloom 2020).

Additionally, a report from the Center for Employment Opportunities (CEO) presented findings from a QED study of their transitional job programs serving individuals with a recent criminal history in New York. The report states that CEO participants in the study were approximately 50 percent more likely to be employed than their counterparts in the comparison group, and that these impacts persisted through three years following enrollment (Center for Employment Opportunities 2019).

B. Career pathways and sector-oriented training

Career pathways programs allow participants to progress through education and training in multiple discrete, stackable components in particular sectors by offering a clear sequence of education coursework or training credentials aligned with employer-validated work readiness standards and competencies (Kozumplik et al. 2011). Career pathways programs under WIOA are defined as programs that offer a clear sequence, or pathway, of education coursework and/or training credentials aligned with employer-validated work readiness standards and competencies, and are guided by six essential components. The six components are: (1) building cross-agency partnerships and clarifying roles, (2) identifying industry sectors and engaging employers, (3) designing education and training programs, (4) identifying funding needs and sources, (5) aligning policies and programs, and (6) measuring system change and performance (U.S. DOL and Manhattan Strategy Group 2015).

Overall, the evidence on the effectiveness of these programs is mixed. A literature review that included 96 impact evaluations of career pathways programs identified that 62 percent of the studies that measured employment outcomes found positive impacts, but 33 percent found no impact (Sarna and Adam 2020).

For example, the Green Jobs and Health Care Impact Evaluation, an RCT of four career pathways programs, found positive earnings and employment impacts for a program in the clean energy sector that included stackable credentials and supportive services, but the other programs were not effective (Martinson et al. 2016). The ShaleNET evaluation found that the ShaleNET noncredit programs had a positive and significant impact on employment in the first, second, and third quarters after completion when compared to the nontraining comparison groups (Dunham et al. 2016). An RCT study of the Accelerated Training for Illinois Manufacturing program that incorporated career pathways observed positive impacts on earnings and employment in the second year after random assignment (Betesh et al. 2017). Interim findings from an evaluation of the Pathways for Advancing Career and Education observed increases in the percentage of participants working in a mid-skill job (Farrell and Martinson 2017). However, in an RCT of a DOL Workforce Innovation Fund grantee serving young adults and including work-based learning and career pathway approaches, participants had statistically significant lower earnings than the control group two years after random assignment (Geckeler et al. 2017).

A recent synthesis report of the impact findings from 23 third-party evaluations using quasi-experimental study designs to estimate the impact of the TAACCCT projects, which were based on a career pathway model, detailed some positive impacts on labor outcomes. The synthesis identified that 6 of the 11 studies examined observed positive employment or earnings impacts (Kuehn and Eyster 2020). Box 4 highlights some of the findings from "A Synthesis of Impact Findings from the Trade Adjustment Assistance

Community College and Career Training (TAACCCT) Third-Party Evaluations" (Kuehn and Eyster 2020).

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Box 4. Findings from "A Synthesis of Impact Findings from the Trade Adjustment Assistance Community College and Career Training (TAACCCT) Third-Party Evaluations"

The TAACCCT grant program awarded $1.9 billion to institutions of higher education offering programs of two years or less to build their capacity to provide workforce education and training to adults in need of new skills for in-demand jobs. The grant program also sought to change education and workforce systems to more effectively address employer needs for skilled workers and transform how community colleges deliver education and training to adult learners. In addition to the improved training, the grantees were required to conduct local evaluations of their programs. The Urban Institute synthesized the impact findings from 23 local evaluations. The synthesis notes the following positive impacts:

- The study of the Advanced Manufacturing, Mechatronics, and Quality Consortium project to enhance advanced manufacturing and career training found that employment rates increased by 38.9 and 54.2 percentage points in the third and fourth quarters after program enrollment (Negoita et al. 2017).

- The evaluation of the Gateway Community and Technical College project IMPACT found that the project raised quarterly earnings increases from the pre-enrollment to the post-enrollment period by $3,133 (Jensen et al. 2016).

However, one of the evaluations observed negative earnings impacts. The evaluation examined the North Dakota Advanced Manufacturing Skills Training Initiative and found that program completers were less likely to have earnings increase after completion (WorkED 2017).

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1.   Sector-oriented training

Sector-oriented training programs are related to career pathways programs and aim to provide training that produce workers with the skills needed by groups of employers in a particular industry or sector that has strong local demand and offers the opportunity for career advancement (Schaberg and Greenberg 2020). These programs are often provided through partnerships between employers and training and educational organizations. Input from employers and published labor market information are used to design these programs, and employers also provide work-based training opportunities, such as internships or on-the-job-training, to participants (Holzer 2015). Many sector-oriented training programs also provide participants with job search assistance and job placement services, and some programs continue working with participants after they find a job (Schaberg and Greenberg 2020). Common industries targeted by sector-oriented training programs include health care, information technology, manufacturing, and transportation (Schaberg and Greenberg 2020).

Three studies of sector-oriented programs have observed positive long-term earnings impacts. Three of four programs using the WorkAdvance model—a model that that provides employee assessments, career readiness services, occupational skills training, and job development and placement services in different sectors—have demonstrated positive impacts on earnings two years after program completion (Hendra et al. 2016; Schaberg and Greenberg 2020). In another RCT study, three sector-based training programs had impacts of $4,500 over the 24-month study period (Maguire et al. 2010). Early findings from the Health Professions Opportunity Grants RCT study suggest that the treatment groups' wages were 4 percent higher than those in the control group in the fifth and sixth quarters after random assignment (Martinson et al. 2016). The evaluation also suggests that the impacts were larger for those with some college or a degree and with fewer barriers to employment before the program began (Martinson et al. 2016). In

addition to positive impacts on participant earnings and wages, qualitative descriptive studies of sector-based programs have also been found to improve employer satisfaction with the trainees because of reduced turnover, absenteeism, recruitment costs, and customer complaints (Lea 2004).

C. Incumbent worker training

Incumbent worker training (IWT) programs provide those who are currently employed with services such as mentoring, on-the-job learning, and other training to help with career advancement and job retention. Under WIOA, IWT programs focus on ensuring that employees of a company can acquire the skills necessary to retain employment and advance within the company, or to acquire skills necessary for averting a layoff (WIOA 2017b). Few studies have rigorously examined such programs, but findings from two quasi-experimental studies demonstrate some positive impacts related to job retention and job advancement. One study that analyzed a formal training program found that training hours were positively related to frequency of promotion over a two-year period (West 2010). A second QED study of a California state-funded incumbent worker program observed positive impacts for employers, such as improved company sales and firm size (Negoita and Goger 2020).

D. Strategies for improving training completion

The WIA Gold study identified several challenges with WIA-supported training: 40 percent of those offered training completed their programs, and of those offered training and entering an occupation-specific training program, 41 percent found employment related to their training (Fortson et al. 2017). Although the research examining strategies for improving training completion is limited, three non-experimental studies have identified promising strategies for improving training completion in career pathways programs. A study of Wisconsin's Making the Future Initiative in advanced manufacturing examined whether embedding short-term certificates or credentials within longer-term "parent" programs led to increased program completion rates. Students enrolled in career pathway programs with stacked and latticed credentials were far more likely to complete nondegree credentials of various lengths (for example, one-year technical diploma, less than one-year technical diploma, and local or career pathway certificate) and were also more likely to earn multiple credentials (Price et al. 2018).

A study of the Health Professions Pathways found that exposing students to holistic supports led to a statistically significant positive impact on credential attainment. The holistic student supports offered to students in this study focused on seven categories: academic advising, assessments, career services, employment services, financial services, nonacademic advising, and social services and counseling (Giani et al. 2018). Additionally, in a study of the Wisconsin Technical College System, adults receiving student supports were much more likely to complete a nondegree credential compared to adult students in the matched comparison group. The student supports examined included academic supports (such as enhanced classroom instruction, tutoring, and test preparation), as well as nonacademic supports (such as personal counseling and case management, job search and placement, and study skills and time management). Some of these supports were integrated into program curriculum or embedded in the classroom, while others were delivered outside of class through both one-on-one and group-level sessions (Valentine and Price 2019).

E. Knowledge gaps related to training models

The WIA Gold Standard evaluation found that training provided through WIOA Adult and Dislocated Worker programs did not detect statistically significant impacts. There has been an increased focus

among workforce development programs on work-based learning strategies, but there have not been enough rigorous studies of these strategies, and relatively few WIOA participants currently receive work-based learning. There are some promising findings from recent evaluations of career pathways and sector-based training, whereas transitional jobs have generally been found to not have impacts in the long term. Some of the gaps that could be examined in future studies include the following:

- What are the impacts of work-based learning strategies such as apprenticeship and on-the-job training implemented under WIOA?

- What aspects of work-based learning models and career pathways and sector models can be adapted under WIOA?

- What types of employer partnerships help make work-based learning successful? How much do employer partnerships contribute to impacts?

- What initiatives help increase training completion, obtaining credentials, and obtaining jobs in the field of training?

- What are the impacts of including additional supportive services along with employment training models? Do these services help different types of job seekers participate in and complete training?

- What types of strategies could make the impacts of transitional and subsidized employment programs persist in years following program completion?

VI. Youth services

WIOA Youth programs incorporate the 14 program elements specified in the Act (Box 5).[6] Because the WIOA Youth funding stream supports many different programs and services, there is not a single WIOA Youth program that could be rigorously evaluated. However, there have been several evaluations of programs serving youth populations. Many of these programs include components similar to those funded through WIOA Youth, or have used WIOA Youth funds to support their services. For example, as detailed below, programs such as Job Corps and YouthBuild have demonstrated some positive impacts on labor outcomes for youth. In this section, we review the evidence on services typically supported by WIOA Youth, as well as other programs that serve youth populations. In addition, many programs supported by WIOA Youth funds deliver services that are the same or similar to those of non-WIOA-supported programs reviewed in this section.

Job Corps, supported under the WIOA legislation, is the nation's largest and most comprehensive career technical training and education program for at-risk youth. The program's objective is to help disconnected youth become more responsible, employable, and productive citizens by providing them with individualized academic education, vocational training, counseling, and job placement assistance. A defining feature of Job Corps is its residential component: Most participants live in a Job Corps center during the week, where all education, training, and counseling services are provided. The National Job Corps Study, a nationally representative RCT, found impacts on earnings and hours worked in the fourth year after enrollment (Schochet et al. 2008). A follow-up to the National Job Corps study found some long-term beneficial effects for the older students (ages 20 to 24), with employment gains of 4 percentage points, a 40 percent reduction in disability benefit receipt, and a 10 percent increase in tax filing rates in

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[6] Some of these components are closely related to strategies discussed in previous sections, but this section focuses on the evidence of these strategies implemented specifically for youth populations.

2015 (Schochet 2020). However, these studies are based on youth entering the program in the mid-1990s; there are no recent, rigorous evaluations of the program.

The **YouthBuild** program, also funded under WIOA, aims to provide at-risk youth ages 16 to 24 with services to help them attain a high school diploma or equivalent and teaches them construction skills, and it has expanded to offer youth career pathways training in high-demand industry sectors (YouthBuild 2020). In a recent RCT of YouthBuild, approximately 75 percent of the youth randomly assigned to the program group (invited to enroll in YouthBuild) participated in the program, and of those who participated, 50 percent graduated. The study also observed that YouthBuild improved employment relative to the control group (youth not invited to enroll in YouthBuild) during the second year after random assignment and led to a small increase in survey-reported wages and earnings at 30 months, but it had no impact on earnings from administrative data (Miller et al. 2018).

> **Box 5. Elements of WIOA Youth programs**
> - Tutoring, study skills training, instruction, and dropout prevention
> - Alternative secondary school services or dropout recovery services
> - Paid and unpaid work experience
> - Occupational skills training
> - Education offered concurrently with workforce preparation and training for a specific occupation
> - Leadership development opportunities
> - Supportive services
> - Adult mentoring
> - Follow-up services
> - Comprehensive guidance and counseling
> - Financial literacy education
> - Entrepreneurial skills training
> - Services that provide labor market information
> - Postsecondary preparation and transition services
>
> *Source: WIOA Sec. 121(b)*

Other evaluations of youth programs with comprehensive services that are not funded by WIOA have also produced some encouraging findings on youth's employment and earnings outcomes. These programs, reviewed below, offered youth a comprehensive set of services, including education, occupational training, work experience, and other supports.

- The **National Guard Youth ChalleNGe** program is a six-month residential program to improve the education, life skills, and employment potential of high school dropouts. Upon completing the residential phase of the program, participants receive a year of structured mentoring and are placed in employment, education programs, or the military. An RCT evaluation of the program found that three years after enrollment, program participants had higher rates of employment and earnings than the control group (Millenky et al. 2011).[7]

- **Year Up** provides urban young adults with intensive training and offers internship tracks in desktop/network support, quality assurance, project management, advanced system administration, and cyber security at corporate partner locations. An RCT of Year Up's career pathways program for youth found that the program increased participant earnings, with program participants earning $1,895 more than those in the control group in the sixth and seventh quarters following random assignment (Fein and Hamadyk 2018).

- **Youth Transition Demonstration (YTD)** projects, conducted between 2006 and 2012, were intended to help youth ages 14 to 25 with disabilities who received or were at risk of receiving Social Security disability benefits to become more economically self-sufficient. Participants were offered

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[7] A more recent report on this program, Millenky et al. (2021), is an outcomes study and does not present evidence on impacts.

some combination of benefits counseling, career counseling, and coordination of services, as well as internships, job shadowing, job coaching, competitive paid employment, and empowerment training. An RCT study examining the program implemented in West Virginia observed positive impacts on employment and earnings one year after implementation (Fraker et al. 2012). However, an RCT measuring the impacts for all six YTD project sites 24 months after random assignment found no significant impacts on employment and earnings outcomes (Hemmeter 2014).

- **Youth Corps** provides youth with a stipend as well as educational services, employment and training, and community service activities. An RCT study of Youth Corps found positive impacts on earnings 18 months after enrollment but no impacts on employment or education (Price et al. 2011).

- **Youth Career Connect (YCC)** is a high school-based program designed to encourage America's school districts, institutions of higher education, the workforce investment system, and their partners to scale up evidence-based high school models that will transform the high school experience for America's youth to connect them to college and careers. The program blends features of the career academy and sector-based models, including small learning communities; college preparatory curriculum based on a career theme that aligns occupational training with employer needs; and employer, higher education, and community partners (Maxwell et al. 2019). A study of YCC included two components, a QED in 16 school districts and an RCT in four school districts that were also part of the QED. Overall, the study found small positive impacts related to accumulating credits for high school graduation (Maxwell et al. 2019).

Work-based learning, a strategy used in many programs funded by WIOA Youth to provide youth with occupational and basic skills training in a work-like setting, is found to have positive effects on employment and earnings outcomes (Carter et al. 2011). For example, an RCT study found that youth who participated in the Center for Employment Training (CET) were more likely to obtain a credential than those who did not participate in CET services. Additionally, participants were more likely to obtain employment in the sectors targeted by the program (Miller et al. 2005).

Similarly, internship programs for youth and young adult populations, commonly used by programs supported by WIOA Youth, have also demonstrated some encouraging findings (Hollenbeck 1996; Quint et al. 1997); however, only one study was conducted within the last 20 years. The study focused on the Young Adult Internship Program and found that the program demonstrated increased earnings for participants a year after completing their internship (Skemer et al. 2017).

A. Programs for specific populations of youth or with specific barriers to employment

The WIOA Youth program has shifted from serving in-school youth to a greater focus on serving older, out-of-school youth, though many states have obtained waivers to use only 50 percent of their funds on out-of-school youth rather than the 75 percent expenditure specified in the legislation (Dunham forthcoming). In addition, changes to out-of-school youth eligibility have encouraged the program to serve youth who fall into one or more barrier-related categories, such as disconnection from school, involvement with the justice system, involvement in foster care, experiencing homelessness, pregnant or parenting, or disabled (Dunham forthcoming). The following studies assess strategies for specific populations of youth.

1. Youth with justice system involvement

Two studies assessing the impact of employment-related programs on youth with justice involvement observed positive findings. In a random assignment study of the Avon Park Youth Academy and

STREET Smart program (National Council on Crime and Delinquency 2009), the program improved employment and earnings. The Avon Park Youth Academy and STREET Smart program serves youth ages 16 to 18 who are transitioning out of a secure custody residential facility in Florida, and its vocational training component includes opportunities for work-based learning through on-the-job training. In a subgroup analysis of JOBSTART, a program providing basic skills education, occupational training, support services, and job placement assistance to youth who had dropped out of school, young males with prior justice system involvement experienced statistically significant gains in earnings in the fourth year after random assignment (Cave et al. 1993). A large-scale evaluation of the Reentry Opportunities Employment grant program is currently under way and will examine impacts on youth with involvement in the justice system.

2. Youth with prior or current foster care involvement

Although few studies have examined the labor market outcomes of youth with prior or current foster care involvement, two have found positive impacts. In an RCT of an intervention helping youth transition out of foster care, youth in the program earned an average of $611 more than youth who did not participate in the program (Valentine et al. 2015). Youth who participated in the program received counseling, referrals to other services, financial assistance, group social and learning activities, and educational and vocational coordination. In a QED study of the Foster Youth Demonstration Project, which provided youth with job preparation and educational and supportive services, youth with foster care involvement who participated in services longer were more likely than those participating for fewer quarters to secure a paid job (Institute for Educational Leadership 2008).

3. Youth experiencing homelessness

A study including two experiments found positive employment impacts of a social enterprise intervention and an Individual Placement and Support (IPS) program for homeless youth. An RCT comparing a social enterprise to the IPS program for homeless youth reported that 39 percent of youth who participated in a social enterprise program reported any paid employment, compared to 32 percent of youth in the IPS program over the 20-month study period. However, this difference was not statistically significant. (Ferguson 2018). The youth who participated in the social enterprise intervention attended vocational and small-business classes and received clinical or case-management services. Youth in the IPS program met individually with their employment specialist, a case manager, and a clinician at least once weekly to discuss life goals such as employment (Ferguson 2018). In another study of youth receiving shelter services including temporary housing, skills training, and referral services, youth who received these services showed no significant improvement in employment status when compared to those receiving day treatment (Thompson et al. 2002).

4. Youth parents or expectant parents

An RCT of the Young Parents Demonstration (YPD) examined the provision of enhanced services to improve educational and employment outcomes for youth parents and those expecting a child. The core program components offered to all study participants typically included education, training, and employment-focused services as well as supportive services. The enhancements offered to the treatment group included mentoring or guided employment, education, training, and related supports. The study found positive earnings impacts for the first two rounds of grantees through the first two years after random assignment. However, overall, the enhanced services had no impact on employment and earnings (Trutko et al. 2018).

5.   Youth disconnected from education or employment

The Performance Partnership Pilots provides services for disconnected youth, defined as individuals between ages 14 and 24 who are low income and either homeless, in foster care, involved in the juvenile justice system, unemployed, or not enrolled in or at risk of dropping out of an educational institution. In a synthesis of the local evaluations of the first cohort of pilots, of the six types of interventions implemented, three demonstrated evidence of improving expected youth outcomes—case management services for out-of-school youth, combined case management and WIOA services for out-of-school youth, and a two-generation education and training program for pregnant and parenting youth. However, one of the three local evaluations examining case management for disconnected youth also found evidence of negative effects of participation in career preparation and subsidized employment (Maxwell and Yañez 2020).

6.   Youth who have experienced trauma

Two models of trauma-informed approaches for youth have been rigorously evaluated: the Attachment, Self-regulation, and Competency (ARC) model and the Sanctuary Model. The ARC model focuses on improving three areas impacted when youth experience trauma—attachment, self-regulation, and resiliency (Berk et al. 2018). For youth ages 13 to 19 in a residential environment, use of the ARC model reduced post-traumatic stress disorder and improved behavior (Hodgdon et al. 2013). The Sanctuary Model—initially developed for adults but more recently adapted to in-school youth and children— develops an understanding of trauma, uses a framework for addressing disruption, and includes an implementation toolkit (Berk et al. 2018). In a residential setting, one combined experimental and quasi-experimental study found that youth in locations that had implemented the Sanctuary Model had greater self-control, reduced verbal aggression, and used fewer negative coping strategies after six months (Rivard et al. 2005). In addition, trauma-informed approaches are also used for adults with barriers to employment in settings outside of WIOA, and this strategy could be applicable to some adult job seekers within WIOA programs.

B.   Knowledge gaps related to youth programs

The studies of training models provided to youth demonstrated some positive impacts, particularly those that included some combination of work experience or supportive services in addition to training. The evidence on interventions serving specific populations of youth is limited and finds mixed results, and it does not always examine interventions provided exclusively to these populations. Also, in recent years, youth programs have shifted to serving youth who are out of school or have barriers to employment. The following gaps could be filled by future studies:

What combination of training, case management, supportive services, follow-up services, and other youth program elements contribute to positive impacts for youth? How do models that provide comprehensive, sector-based education and training compare to models that provide more limited work experience?

What are the impacts of programs directed specifically toward those out of school and those with barriers to employment?

How do impacts on youth served by programs supported by WIOA Youth compare to impacts on similar youth participating in programs serving broader populations?

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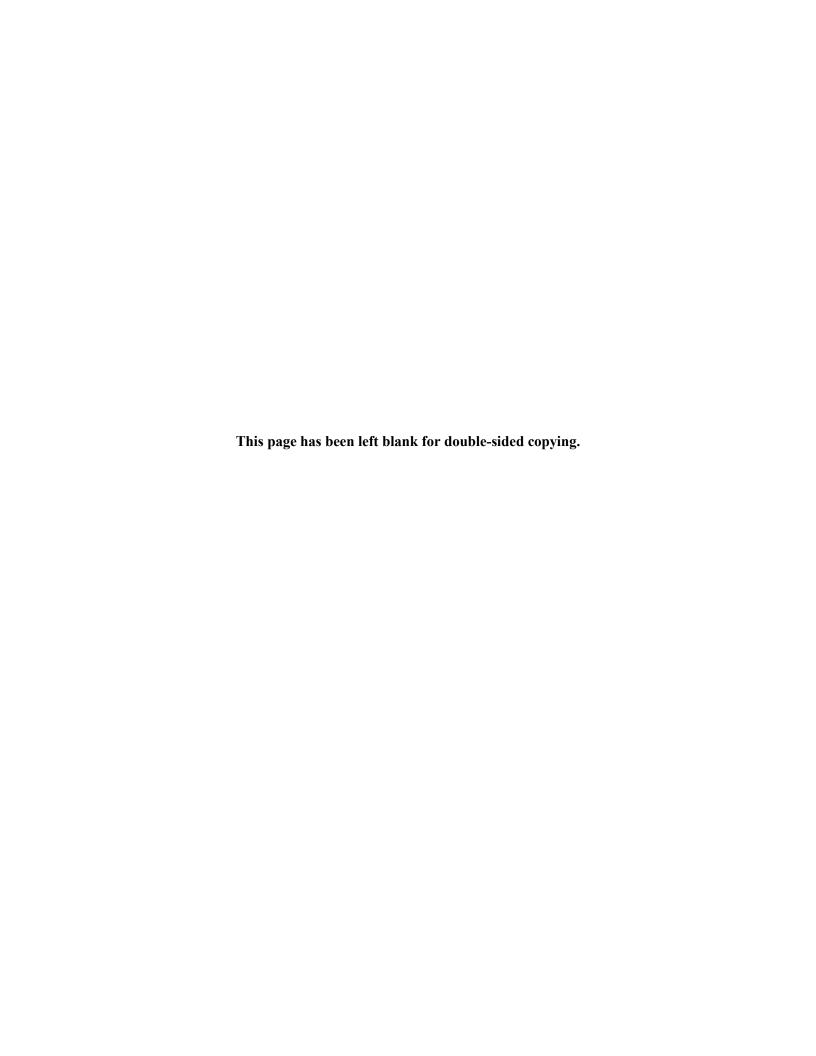
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