

Maximising the Impact of Careers Services on Career Management Skills: A Review of the Literature

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Executive Summary

The development of Career Management Skills (CMS) is one of the main areas against which the National Careers Service is monitored and funded. Under the initial contract this was one of three outcome measures (customer satisfaction, careers management and progression to learning and work). This third measure has been divided to include progression to learning and progression to work/jobs. This paper reports on the summarised findings from a review of the literature relating to CMS. The initial review in 2015 identified over 15,000 papers for possible inclusion and a systematic process was applied to sift these down to 21 high quality papers that directly address the core issue of CMS outcomes. This 2021 update includes a further 16 papers, following the same systematic search and review process.

The review identified an international body of work on the development and implementation of competency frameworks in reaction to CMS, including the 'Blueprint' frameworks, which are a series of inter-related national approaches to career management skills (originating in the USA and taken up subsequently, and with different emphases, by Canada, Australia, England and Scotland). There is, as yet, little empirical evidence to support the overall efficacy of CMS frameworks, but they have the advantage of setting out **what needs to be learned** (usually as a clear and identifiable list of skills, attributes and attitudes) and, often, **how this learning is intended to happen**.

The international literature emphasised the iterative nature and mixture of formal and informal learning and life experiences that people needed to develop CMS. It suggested that, though there was no single intervention or group of interventions that appeared most effective in increasing CMS, there were five underpinning components of career guidance interventions that substantially increased effectiveness, particularly when combined. These included the use of narrative/writing approaches; the importance of providing a 'safe' environment; the quality of the adviser-client relationship; the need for flexibility in approach; the provision of specialist information and support; and clarity on the purpose and aims of action planning. Further literature from the 2021 update emphasised how the nature of certain interventions were found to be more appropriate and effective with certain customer groups (e.g. narrative approaches that fostered storytelling and meaning-making through counselling relationships were found to be best suited to assisting women develop their CMS.)

The review also identified a possible emergent hierarchy around the efficacy of different modes of delivery of career guidance interventions on CMS development. Interventions involving practitioner contact and structured groups appeared more effective than self-directed interventions or unstructured groups. Computer-based interventions were found to work better when practitioner input was provided during the intervention or when they were followed up by a structured workshop session to discuss and review the results.

In the 2021 update, the review picked up greater emphasis on the context in which CMS are developed, the '*where*' rather than '*when*', with community settings recognised as relevant sites for career guidance activities leading to CMS development (Thomson, 2017; Barnes et al., 2020). Where there are a range of organisations and professional services working in, and with communities, this provides opportunities to create links between an individual's need to develop CMS and access to existing support. These existing networks could be utilised more by the National Careers Service in their service delivery.

There was an established evidence base on how to develop CMS skills (such as through engagement with self-awareness or career decision-making activities). However, as Sultana (2012) argued, more needs to be done to better understand the impact of CMS on economic and social outcomes, such as individual self-efficacy, approaches to developing occupational pathways, progression to employment and increased satisfaction at work. Linked to this, there is also a lack of evidence in relation to the experiences of groups with protected characteristics, and research on the support and development of CMS from these perspectives is required to ensure relevant career support and guidance is available. The Best Practice Programme of research and subsequent Continuous Improvement Programme within the National Careers Service has provided an ideal opportunity to explore any emerging relationship between individuals' CMS development, especially priority customer groups, and jobs and learning outcomes.

Introduction

The development of Career Management Skills (CMS) is one of the main intended outcomes for recipients of career guidance. The term CMS refers to the **skills, attributes and attitudes** that are thought to be required to enable people to effectively plan, manage and develop their careers throughout their lives. The concept of CMS recognises that career development is based on individuals moving around in increasingly fluid labour markets. An important justification for incorporating CMS in the design and delivery of career guidance services is an awareness of the range of competencies required to manage these non-linear career pathways, including self-efficacy, resilience, adaptability and responsiveness to change.

This paper updates the findings from a 2015 review of the literature relating to careers management skills. It forms part of a series of papers initially produced to inform development of a Best Practice Programme for the National Careers Service in England and which now underpin the Continuous Improvement programme. At the time of the original research, the service had recently undergone a shift to an outcome-based funding model, with three outcome measures for the service (customer satisfaction, career management and progression to jobs and learning). These measures have subsequently been refined to include measures for progression to learning

and progression to jobs, highlighting the emphasis of the service on enabling people to enhance their skills and move out of long-term unemployment. The findings are of relevance to policy makers, service managers and practitioners as they work towards the achievement of career management skills amongst customers.

Methodology

This paper is one part of an update to a series reporting the results of a literature review commissioned by the then Skills Funding Agency (now the Education and Skills Funding Agency) to inform development of a Best Practice Programme (now the Continuous Improvement programme) for the National Careers Service. The following five themes / questions were identified for the review to focus on:

1. What evidence exists which describes the **policies, systems and processes** that underpin the organisation of national careers services? [Internal Report to SFA]
2. How can careers services maximise **customer satisfaction**? [currently located [here](#) and also available [here](#)]
3. How can careers services maximise their impact on **career management skills**? [[currently available here](#)]
4. How can careers services maximise their impact on individual's **progression to positive learning and work destinations**? [[currently available here](#)]
5. How is effective **brokerage** between education and employers organised? [[available here](#)]

The original **policy review** was sent as an internal document to the SFA/ESFA and so was not included in the updating process for the National Careers Service. The **brokerage review** was initially intended to inform the work of the National Careers Service in relation to the 2013 skills strategy *Rigour and Responsiveness in Skills*, which explicitly note the requirement for the National Careers Service at that time to 'play a proactive role in connecting employers, education institutions and local partners' to identify and promote opportunities for young people. This was a specific focus of the Inspiration Agenda but is now more fully under the remit of the Careers & Enterprise Company.

This paper reports on the results relating to **career management skills**. A set of core and secondary search terms were identified for this theme (Table 1). These were **applied to the indexes, databases** and search engines listed in Annex A.

Table 1: Search terms relating to career management skills

Core search terms	Secondary search terms
<ul style="list-style-type: none"> • Career development • Career(s) counsel(l)ing • Career(s) guidance • Careers(s) advice • Guidance • Guidance counsel(l)ing • Information, Advice and Guidance (IAG) 	<ul style="list-style-type: none"> • Career information skills • Career management • Career management skills • Career planning • Career resilience • Career self-efficacy/self-efficacy • Decision(-)making

Core search terms	Secondary search terms
<ul style="list-style-type: none"> Lifelong guidance 	<ul style="list-style-type: none"> Employability skills Job search skills Opportunity awareness Self-awareness Transferable skills Transition skills Using LMI/Labour Market Information Careers assessment Diagnostic assessment

The initial search in 2014 produced a total of 26,600 results across all five research questions. The searching process in 2021 found 62 results across the three areas of career satisfaction, career management and career progression, the areas selected for updating.

On each occasion, the results of the search process were uploaded to EPPI-Reviewer 4, a software package designed to facilitate an iterative approach to reviewing the results of literature searches. The abstracts were then subject to a seven-stage review process aimed at filtering out duplicates, any unsuitable or non-relevant material, as well as studies considered not to be of sufficient quality (perhaps lacking an indication of method) for use in the full text review. An overview of this process is provided in Table 2, as well as the results from each of the stages.

Table 2: Summary of process for review of results

Stage:	First review (2014/15): Total remaining:	Update review (2021): Total remaining
1. Full search results	26,600	62
2. Duplicates removed	15,300	0
3. Core search terms applied to Title and Abstract	7,100	62
4. First sift to remove unsuitable material: <ul style="list-style-type: none"> Media items – e.g. TV / radio interviews and newspaper articles Conference notes Individual biographies Non-research material Items not relevant to careers Non-English language material 	3,100	62
5. First stage exclusion criteria applied to remove abstracts that were: <ul style="list-style-type: none"> Pre-2000 Not focussed on the provision of careers guidance, information or advice Missing a methodology statement Not of direct relevance to any of the five research questions 	326	50
6. First stage coding applied to remaining abstracts covering: <ul style="list-style-type: none"> Method – qualitative / quantitative / mixed Country of study 	326	50

Stage:	First review (2014/15): Total remaining:	Update review (2021): Total remaining
<ul style="list-style-type: none"> • Research question(s) of relevance <p>7. Second stage coding applied to abstract (where possible):</p> <ul style="list-style-type: none"> • Research design • Target population • Implementation of research design • Quality of interpretation and conclusions <p>Abstracts that, on further investigation, were deemed not to meet the quality criteria, were excluded at this stage.</p>	160	24

In 2014/2015, of the 160 abstracts remaining following completion of this systematic review and coding exercise, **80** were identified as appearing relevant to the question on career management skills. Those taken to the second stage of review were subject to an additional level of review, which resulted in around half being excluded as a result of being:

- **Unrepresentative** – for example, having drawn on a very small / niche sample
- **Unclear** – on the nature of the intervention being tested and reported on
- **Theory-based** – focussed on assessing the concept, rather than the effectiveness of practical interventions aimed at increasing CMS
- **Not related to a specific intervention / approach** – several studies looked at relationships between different CMS competencies, rather than interventions aimed at developing these.

Full-text copies of the remaining papers were subject to a more in-depth review aimed at identifying the key emerging themes. At this stage, further studies were excluded as the full text revealed that they either reported on part of a study that was already included in the review or provided only weak, insecure or unsubstantiated findings. The bibliographies of the studies identified as being of particular relevance to the topic were then reviewed to identify any additional material (including articles published before the year 2000) that would be suitable for inclusion in the review.

In 2021, a further 16 studies were identified for inclusion in the updated review following the same systematic process. A total of **37** studies were drawn on in the development of this paper [21 of which were in the original review]. References for all of the included papers are provided in Annex B.

What are Career Management Skills?

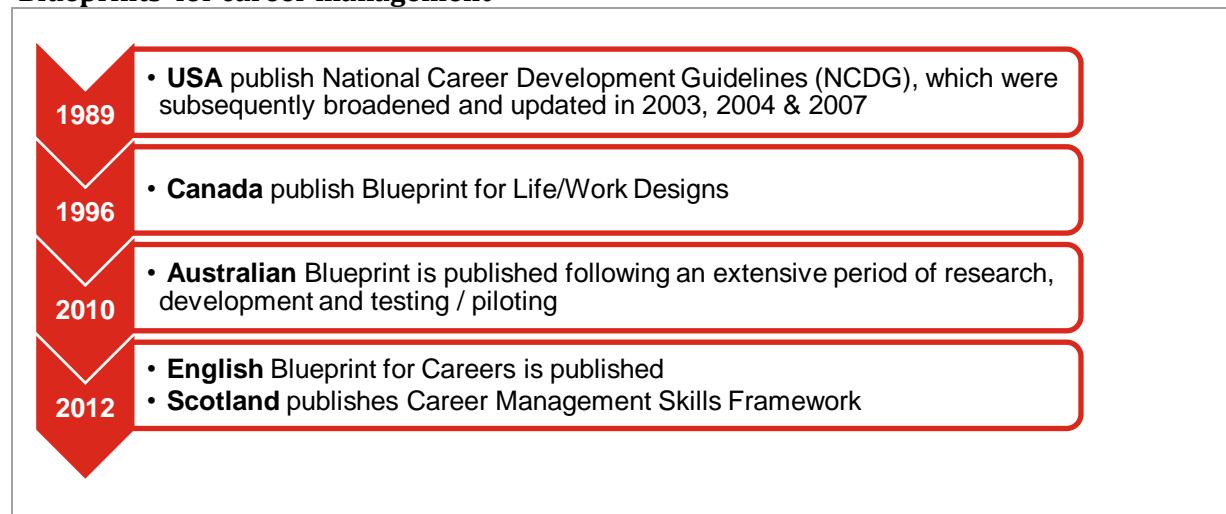
“Career management skills refer to a whole range of competencies which provide structured ways for individuals and groups to gather, analyse, synthesise and organise self, educational and occupational information as well as the skills to make and implement decisions and transitions.”

as defined by European Lifelong Guidance Policy Network (Sultana, 2009)

There is an international body of work on the development and implementation of competency frameworks. A particularly important set of CMS frameworks are the 'Blueprint' frameworks, which are a series of inter-related national approaches to career management skills. This family of CMS frameworks originated in the United States more than thirty years ago and was subsequently taken up by Canada and then Australia (Hooley *et al.*, 2013). Within the last decade, the notion of developing country-specific iterations of the Blueprint framework also extended to England (LSIS, 2012) and Scotland (SDS, 2012). A brief overview of the chronology of these developments is provided in Figure 1.

The European Lifelong Guidance Policy Network (ELGPN) has also explored the possibility of developing a European Blueprint. However, the decision has been taken not to develop a common CMS framework across European countries at present, given the divergent epistemology, curricular traditions and guidance approaches amongst member states (Neary *et al.*, 2016a and 2016b). Instead, the ELGPN encourages member states to develop their own CMS frameworks along the lines of those found in the Blueprints (Thomsen, 2014).

Figure 1: Chronology of international development of competency frameworks or 'Blueprints' for career management



*Source: Adapted from Hooley *et al.* (2013)*

A common feature of each of the Blueprints / frameworks is that they seek to breakdown 'career management skills' into clear and identifiable lists of skills, attributes and attitudes, which careers services can seek to act upon and which can potentially be assessed. This has the advantage of providing a common language and structure for planning, developing and reviewing career guidance services, programmes and activities.

Table 3 displays examples of the skills, attributes and attitudes referenced within the literature as 'career management skills'.

Table 3: Examples of skills, attributes and attitudes

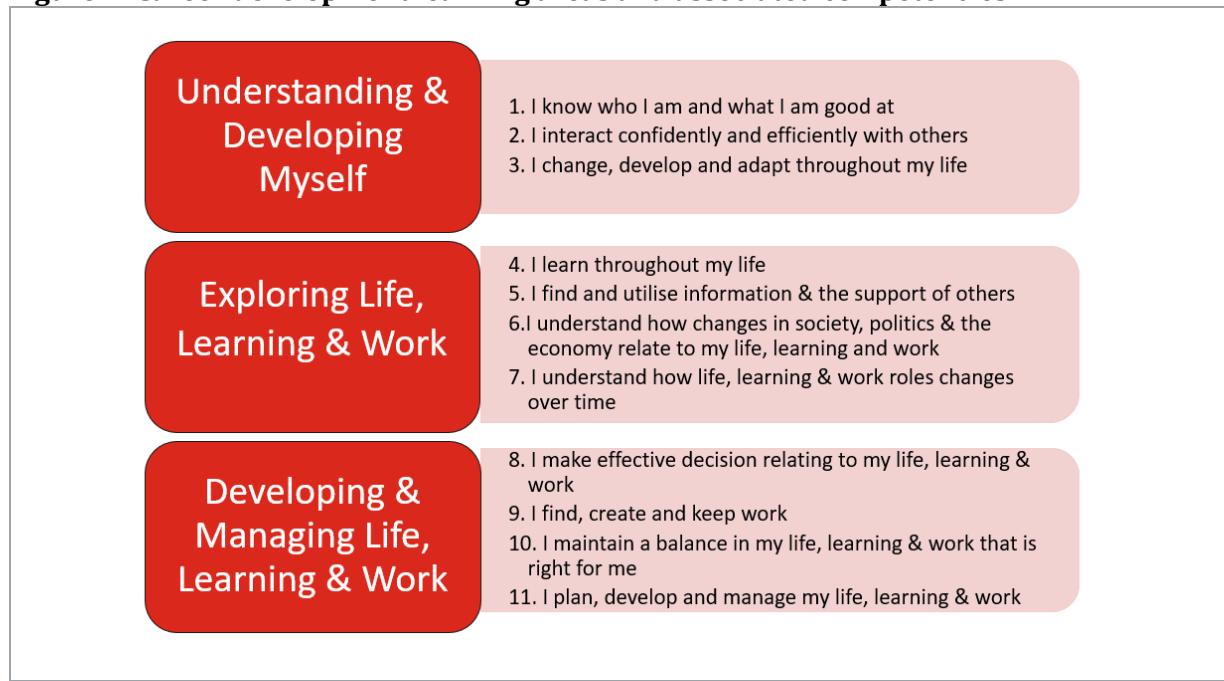
Tenacity	Understanding change	Interview skills
Resilience	Work exploration	CV writing

Adaptability	Work reflection	Cover letter writing
Self direction	Understanding LMI	Digital and media literacies
Self exploration and awareness	Setting career goals	Social networking
Positive attitude	Self presentation	Research skills

Source: Literature reviewed (2021, 16 sources)

The Learning and Skills Improvement Service (LSIS) developed a pilot Blueprint for all-age career guidance services in England in 2009 (LSIS, 2009). This was based on the Canadian and Australian versions. After a period of trials (LSIS, 2011) the English Blueprint was reworked and published in 2012 (LSIS, 2012), although it still drew heavily on the Canadian and Australian versions. The English Blueprint remains current, although LSIS closed down in August 2013 before it could be fully implemented. It sets out a framework of 11 career competencies for individuals arranged in three 'learning areas' (Figure 2). This provides useful context for interpreting the findings from the available literature on best practice approaches to developing CMS.

Figure 2: Career development learning areas and associated competencies



Source: Adapted from LSIS (2012)

There are some tensions inherent in the discourse surrounding CMS. For example, Sultana (2012) highlights a tension between the ever increasing focus on CMS across Europe and other developed nations on the one hand, and the decline in secure employment opportunities on the other. Whilst the intention behind the development of CMS may be to increase employability, equity and social inclusion, the unintended sub-text could be that individuals who find themselves out of work "have only (or mainly) themselves to blame". That is, they are somehow deficient in the life skills required to maintain employment, when in fact the issue could be due to structural problems on the demand-side of the labour market, which cannot be addressed through individual agency alone.

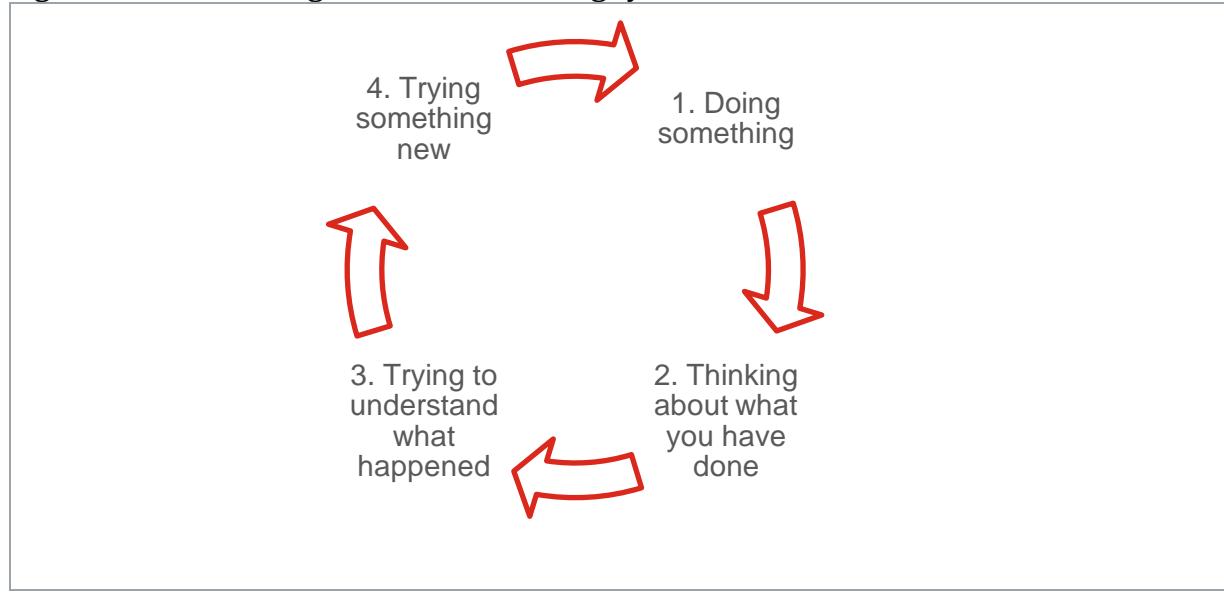
However, a focus on CMS does not necessarily have to be interpreted to mean that *only* CMS are important. CMS are designed to support individuals to be both resilient in the face of structural changes and flexible in dealing with these changes. Some versions of the Blueprint also seek to build in a critical perspective through which careers workers and their clients can reflect on structural issues and consider a range of responses to them. The English Blueprint offers this kind of critical space largely through learning areas 6 and 7, which both encourage reflection on the context of career building.

How do people develop Career Management Skills?

In addition to setting out what needs to be learned, the Blueprint frameworks conceptualise **how this learning is intended to happen**. Underpinning the Blueprint model is the assumption that learning about careers is something that people do throughout their lives and with the help of a wide range of people. Many people develop career management skills through a **mix of formal and informal learning and life experiences**, whilst others need professional support with the learning and work decisions they will face.

The LSIS Blueprint presents a cyclical vision of how the process of career learning is considered to take place (LSIS, 2012) and this is shown in Figure 3. It is based on Kolb's learning cycle, which depicts learning as being built up through an individual's experiences, their reflections on those experiences, their ability to develop conceptual understanding from their reflections, and their ability to use their understanding to experiment with new approaches to their world (Hooley *et al.*, 2013).

Figure 3: Career management skills learning cycle



Source: LSIS (2012), based on Based on Kolb's learning cycle (1984)

Where do people seek advice from?

The implications of this model are that career guidance services are only one of many potential routes for individuals to develop the CMS required to manage their careers. This is supported by

findings from a longitudinal study looking at the effectiveness of career guidance interventions, which found that individuals seek advice and guidance from a broad range of sources, including professional guidance practitioners, family and friends, colleagues, mentors and tutors (Bimrose *et al.*, 2008).

More recently within the literature, research has been concerned with whether (and if so how) the development of CMS and use of different sources for advice and guidance differs between certain groups of individuals depending on their characteristics. In a 2014 qualitative international comparative study into the career trajectories of older women (aged 45–65) across six countries (Australia, Argentina, Germany, Italy, England and South Africa) Bimrose *et al.*, observed that career support for the women was almost exclusively from informal sources such as family, friends and colleagues. Parental expectations and traditional role models were also found to have an influence on the women's career decisions, leading to lower qualification routes and less ambitious careers than those that the women had initially contemplated.

Despite the different country contexts, common across the women's narratives was a lack of formal support, especially at key career moments. This study emphasised the need for career support for women that is widely available and relevant to their individual needs. Bimrose *et al.*, 2014 further argued that labour market intelligence suggests that young women face similar issues to older women and should be included in decisions made on designing future career service provision.

When exploring the experiences of students, Williams (2018) found that students valued information which came from careers guidance professionals, teachers and alumni, and these groups were more influential than family and friends. He found that students were 'risk-averse' and sought the relevance and reliability of the information provided through formal education pathways to help them evaluate their career options. Further research on students by Starcic (2017) found, that university students (contrary to expectations) tended not to use social networking sites to develop their CMS and were not aware of the potential of such sites for career management.

Recognising the powerful role of other formal and informal routes, and making links with these, is therefore an effective way of supporting individuals to maximise the learning opportunities available to them. This issue was also raised in a paper produced as part of the current review series, which looked at how careers services can maximise their impact on individual's progression to positive learning and work destinations (Neary *et al.*, 2015). It highlights a role for career practitioners in helping customers to understand their support network and to develop strategies to maximise the range of help available for their progression.

A further feature of the LSIS model, in contrast to some other versions of the Blueprint, is that it is non-hierarchical and suggests that career learning is something that happens **throughout life** rather than a one-time "process of achieving mastery". This feature also serves to challenge the assumption that the development of CMS occurs alongside other age and stage related learning in wider education (Neary *et al.*, 2016). If CMS do not develop in a hierarchical way, then it becomes more likely that CMS are context dependent and the focus becomes less about *when* these skills are developed, and rather *where* they are developed. Further, this thinking helps to differentiate

between careers learning within the education system and employability programmes, and the development of competencies in career management. As such, the development of CMS can be seen as linked to a commitment to lifelong learning and personal and professional development. Barnes *et al.*, (2020) argues that a better understanding of context is required when considering how and where people develop CMS. As context has often been overlooked in career development interventions, community settings have not been often recognised as relevant sites for career guidance activities (Thomson, 2017; Barnes *et al.*, 2020). Sports clubs, youth clubs and young parent clubs, for example, can be potential sites for community-based career guidance leading to the development of CMS. Where there are a range of organisations and professional services working in, and with communities, there are opportunities to create links between an individual's need to develop CMS and access to existing support. By acknowledging context, this also recognises that there are structural issues which affect a person's ability to career manage and develop their CMS and which may mean individuals in some areas may require more personalised support (Hooley, T. in Thomson, 2017).

How does the National Careers Service define and measure career management skills?

'Career management' is one of three customer outcomes that National Careers Service providers were paid to deliver under the original outcome-based funding model, with the other two being satisfaction and progression to jobs and learning. The funding model for the service at that time depicted an **apparently linear customer journey** in relation to these three outcomes, with the customer satisfaction outcome expected to be claimed first, followed by career management and then progression to jobs and learning. In terms of the latter, this could only be claimed if a customer has already achieved both a customer satisfaction outcome **and** a career management outcome. More recently, the funding model has differentiated between progression to jobs and progression to learning, recognising that customers could progress from one to the other (from learning to work or from work into associated learning), depending on circumstances.

The National Careers Service Funding Rules in 2014 defined career management outcomes for the service in the following way:

Career management outcomes are defined as customers demonstrably continuing to manage their career independently, continuing to assess their skills, consider employer demand, pursue further learning, access their Personal Learner Record, update their Lifelong Learning Account, improve their CVs and seek to fulfil their potential. Establishing customers with this behaviour will lead to more people continuing to extend their skills and pursue their employment goals.

National Careers Service Funding Rules 2014-15 (Skills Funding Agency, 2014)

In the [updated funding rules](#) (for November 2019 and March 2021) there was a shift in this definition in terms of placing the emphasis on the support provided by the service rather than on the customers actively demonstrating the range of skills (evidence for which can be hard to obtain). Under the Area Based contracts from 2018, Career Management Outcomes were defined as:

“...careers information, advice and guidance that support Customers to understand the value and importance of career management as a lifelong activity and encourages the Customer to develop the skills, confidence, resilience and resourcefulness to manage their careers independently throughout their lives.”

Funding Rules for National Careers Service 2018-2021: Version 6.0 (Education and Skills Funding Agency, 2021)

In 2014, seven career management ‘outcome measures’ were identified against which National Careers Service contractors could claim (see Table 3). These ‘outcome measures’ were in fact largely a list of actions that customers might undertake as a result of engagement with the service, and which in turn were expected to result in CMS development. They could therefore be considered CMS-related activities / outputs, rather than CMS outcomes for customers. The evidence requirements in 2021 (see Table 3) also emphasise evidence of CMS-related activities, though there is, arguably, more of a stress on the successful completion of activities.

Table 3: National Careers Service Career Management Outcome Measures

CMO 2014-15	CMO evidence required 2021
<p>1. Creating/updating/tailoring a CV</p> <p>2. Uploading a CV to Universal Jobsmatch or any other relevant jobsites (including the Lifelong Learning Account)</p> <p>3. Use of tools such as Mid-life Career Review, Skills Health Check and other similar career management programmes or tools</p> <p>4. Attending a careers workshop or similar event</p> <p>5. Undertaking voluntary work on a regular basis or equivalent relevant work experience</p> <p>6. Regular use of National Careers Service or other relevant websites and resources</p> <p>7. Use of social media to evidence career management or to build their own social and professional network</p>	<p>Evidence required of at least two career management activities undertaken by the Customer, at least one of which must be a digital activity</p> <p>Output of digital activities undertaken such as:</p> <ul style="list-style-type: none"> • Copy of CV • Confirmation of online application, or enrolment • Activity or tool results <p>Evidence of non-digital activity must include:</p> <ul style="list-style-type: none"> • Written or electronic evidence from the place where a Customer undertakes voluntary work • Written or electronic confirmation from the learning establishment or a signed learning agreement where a Customer has applied for or enrolled on a course • A copy of a CV; or • A list of attendees on a headed document complete with date and title of the workshop/session where a Customer has attended a group session or workshop.

Source: Skills Funding Agency (2014) and Education and Skills Funding Agency (2021)

The output-based CMS frameworks in use, in both 2014 and 2021, by the National Careers Service therefore **appear at odds with the CMS Blueprint frameworks**, which focus on career learning outcomes. The Blueprint frameworks are underpinned by learning models or theories of change, and are evidence-based, having been subject to extensive research, development, testing and

review. The apparently more instrumental output-based approach could narrow the scope for career learning to a smaller number of outcomes.

The aim of the initial review was to identify, from the available evidence, the key components of career guidance interventions that had been found to be successful in developing CMS. The review identified **five underpinning components** of career guidance interventions that had been found to substantially increase effectiveness, particularly when combined. However, it also concluded that the CMOs being used as the basis for funding the National Careers Service should be reviewed with the aim of developing a more outcome-based approach. This review updates the previous findings with new national and international research.

Limitations of research on Career Management Skills

Despite policy-level consensus across Europe and beyond that there is much to be gained from integrating CMS within career guidance services, there is as yet **little empirical evidence to support the efficacy of CMS frameworks**. This does not mean that they are not effective, but that, until recently, little research has focused on this area.

Equally, whilst there is an evidence base on how to develop skills such as self-awareness or career decision-making, there is less evidence relating to the relationship between CMS and outcomes such as progression to positive learning and work destinations. Sultana (2012) argues that more needs to be done to better understand the impact of CMS on economic and social outcomes, such as individual self-efficacy, approaches to developing occupational pathways, progression to employment and increased satisfaction at work. In relation to this, the Best Practice Programme of research within the National Careers Service provides an ideal opportunity to explore any emerging relationship between individuals' CMS development and jobs and learning outcomes.

There is an extensive body of literature relating to career management theories, perspectives, models and interventions. However, detailed descriptions of the *practical* use and implementation of the majority of these interventions are quite limited. There is also limited recent evidence on the *effectiveness* of interventions in developing career management skills amongst different client groups (Callanan *et al.*, 2017; Bimrose *et al.*, 2014). There is also a lack of consistency in how 'effectiveness' is measured, and from whose perspective this is recorded. Specifically, the experiences of women are thinly represented in the existing literature and needs further research, while the development of CMS by age and gender needs to be explored further to inform more targeted interventions. There is a lack of evidence in relation to the experiences of other groups with protected characteristics, and research on the support and development of CMS from these perspectives is required to ensure relevant career support and guidance is available. Given the National Careers Service focus on priority groups, this lack of international evidence on the success of different CMS interventions with different customers suggests that there is an opportunity and significant scope for the improvement of the collection, collation and analysis of more granulated (anonymised) customer data within the service.

The review identified two comprehensive meta-analyses of evidence on the relative efficacy of different types of career guidance interventions. These highlight the underpinning components of effective career guidance, which provide useful context for assessing the efficacy of individual interventions. However, whilst useful, they are more than a decade old and there are no other studies available of this scale and comparative nature. The rest of the literature that is available is generally drawn from small-scale, qualitative studies (there are some exceptions, such as Vuori *et al.*, 2012), and tends to be focussed on a specific client group (e.g. Sturges *et al.*, 2003) and / or a narrow set of outcomes associated with one type of intervention. As a result, most of the research is inconclusive on the impact of interventions on the range of career management skills.

How can career guidance services impact on Career Management Skills?

The most comprehensive review of evidence looking at the efficacy of career interventions on career-choice and other outcomes, such as congruence, vocational identity, career maturity and career decision-making self-efficacy was carried out by Ryan (1999). It involved meta-analyses of the results of 62 studies involving 7,725 participants. The average length of interventions was 7.5 sessions over five weeks, which were relatively equally dispersed across self-directed, group, class, and combined interventions (only eight per cent of studies used one-to-one counselling support alone). The following five individual intervention components were found to contribute significantly to a positive effect size in at least one of the analyses:

- Written exercises
- Individualised interpretation and feedback
- Information concerning the world of work
- Modelling opportunities
- Attention to building support for choices.

Subsequently, in a further review and meta-analysis, Brown and Ryan Krane (2000) found that when more than one of these five individual components were combined it resulted in almost linear increases in effect sizes. Brown and Ryan Krane (2000) therefore concluded that, regardless of format, **the efficacy of career choice interventions can be increased if at least three of these five critical ingredients are integrated within them.**

The following sections provide more detail on each of the five critical ingredients of effective career interventions and considers some of the available evidence of 'what works' in terms of specific interventions and approaches associated with each. This offers a useful starting point for thinking about the types of interventions that might be most effective in developing CMS amongst National Careers Service customers. At the moment, however, the career management measures that contractors are being paid against are effectively outputs or activities, rather than CMS outcomes. Further clarity on the specific outcomes that the service is looking to achieve in relation to CMS will be required before a definitive set of interventions can be recommended.

Written exercises

The first of the 'critical ingredients' for effective career interventions identified by Ryan (1999) is **written exercises**. These include interventions that involve clients writing reflections, thoughts and feelings on their vocational development, which could be in vocational journals / diaries and which could include future career goals and plans.

A study by Lengelle (2014) looked at the impact of **creative, expressive and reflective writing** on the development of career identity. The contents of writing by higher education students who participated in two-day writing courses before and after work placements were compared with those of a control group. The hypothesis that career writing might result in beneficial change was based on previous research showing that experiences alone do not lead to a person's learning and development, but that **experiences and a dialogue about those experiences** contribute to real career learning (Kuijpers et al., 2011). This also aligns with Kolb's model of career development and reflection depicted in Figure 3 (Kolb, 1984).

The Lengelle (2014) results suggest that career writing '**holds promise**' as a viable narrative approach, although the sample size was too small to draw firm conclusions on this. It is worthy of further exploration, with a range of potential benefits should it prove to be effective:

- It can be delivered in a group setting, offering an alternative to one-to-one counselling
- It can stimulate internal and external dialogues that could potentially foster the development of 'soft skills' such as self-awareness and communication
- It is both a time- and cost-effective approach, without being automated or mechanical
- Career professionals with an interest in narrative approaches can learn a lot about career-writing in a relatively short time, although would need at least two days of instruction and personal practice in order to implement this method.

Individualised interpretation and feedback: Lessons from therapeutic counselling

Ryan (1999) identified **individualised interpretation and feedback** as one of the five 'critical ingredients' for effective careers interventions. This usually involves the provision of one-to-one feedback from career practitioners on vocational issues and activities, including assessment results, goals and future plans. Westergaard (2012), for example, carried out qualitative research with five therapeutic counsellors working with young people aged between 13 and 25 at a counselling agency in London. The aim was to identify the conditions for success in supporting young people to work towards and achieve positive change in their lives. The study identified four main themes, three of which were considered of relevance to informing career guidance practice and these are detailed in Table 4.:

Table 4: Emerging themes and implications for career guidance practice

Theme:	Description:	Implications for career guidance practice:
The importance of providing a 'safe place' for individuals to share their thoughts and feelings	This refers to both the physical environment and the boundaries of the relationship between the practitioner and client.	Having an appropriate physical space in which to engage with clients and being open and clear on the limits of confidentiality and boundaries of the relationship.
The quality of the counsellor-client relationship	The importance of understanding clients' lives, thoughts and feelings (empathy), the need to be genuine, real and human (congruence) and non-judgmental (unconditional positive regard) were all highlighted as important.	Resource constraints are a key challenge for career advisers in relation to this theme as they have a direct impact on the time available to develop a relationship of respect, honesty and trust with clients.
The need for flexibility: an integrative approach	Research participants were not concerned with adhering rigidly to the counselling approach in which they were trained, but were more focussed on responding flexibly to the needs of individual clients.	The integration of new or unfamiliar career counselling approaches may appear challenging to experienced practitioners who have developed ways of working, and equally daunting to new practitioners who are putting their learning into practice.

Source: Adapted from Westergaard (2012)

Rothwell, in Callanan *et al.*, (2017), also emphasised the range of options available to counsellors to provide a personalised service dependent on the profile of the client, in terms of their age, personality and level of digital literacy, through a variety of employability resources in different interventions, that would support their career management. Similarly, Bimrose *et al.*, 2014 found that narrative approaches that fostered storytelling and meaning-making through counselling relationships were found to be best suited to assisting women develop their CMS.

In developing the evidence base on the impact of lifelong guidance for the ELPGN, Hooley (2014) also found positive impacts from individual and group counselling on developing CMS within Europe (Table 5).

Table 5: Examples of interventions to develop CMS and impact findings

Country	Intervention	Research	Findings
Estonia (2011-12)	Individual and group counselling offered to young people in Career Centres	Online surveys of service users one month after they had interacted with the service	Most respondents agreed the service had: increased their confidence, helped them gain new perspectives and helped them to put together a career plan

Country	Intervention	Research	Findings
Finland (2012)	<p>Aimed to better prepare employees to manage their careers.</p> <p>The intervention group were invited to group workshops, whereas the comparison group received printed information about career and health-related issues.</p>	RCT to examine the impacts of a group intervention on career management, mental health, and job retention (N=718)	Follow-up results (post-7 months) showed enhanced CMS which led to "significantly decreased depressive symptoms and intentions to retire early."
Netherlands (2013)	Career education and guidance among students (ages 12–19) enrolled in prevocational and secondary vocational education	Quantitative study of 3,499 students and 166 teachers to investigate the impact of guidance and career learning within vocational education on the development of CMS and career outcomes	<p>Guidance, when based on dialogue, contributes to motivation, decision-making and career outcomes.</p> <p>Found a positive relationship between CMS and career outcomes.</p>

Source: Hooley (2014)

Individualised interpretation and feedback: Assessment of Personal Goals

In addition to one-to-one support from a career practitioner, individualised interpretation and feedback can also be provided via online assessment tools. Henderson (2009) published a study reported on the effectiveness of the **Assessment of Personal Goals (APG)** measurement instrument. The APG was designed to enable 'helping' professionals to identify the main sources of motivation in a person's life. It has been used on four continents and in at least ten countries, including non-English speaking countries in Asia, Europe and South America. Its primary use has been in counselling and coaching settings.

The APG is grounded in Motivational Systems Theory (MST), which provides concepts and principles for understanding how personal goals, in conjunction with other motivational processes, can help determine:

- How people are likely to react, emotionally and behaviourally, to career, relationship and life opportunities
- The intensity of interest and commitment people are likely to experience as they engage in different settings
- The likelihood that engaging in a particular setting will result in satisfaction or disappointment.

The APG is an online tool that can facilitate efforts to help people to better understand themselves and their motivations. Further research is required in order to evaluate its full potential. However, its strengths-based orientation, applicability to multicultural and international populations, and grounding in a psychological systems framework appears to make it a **potentially promising tool for career practitioners**.

World of work information

The provision of **world of work information** is identified as a further critical component of effective career interventions (Ryan, 1999). This includes information about economic and labour market trends and opportunities, as well as about specific career options and pathways.

The importance of world of work information was confirmed in a longitudinal qualitative study looking at the career trajectories of fifty adult consumers of diverse guidance services in England (Bimrose *et al.*, 2008). This five-year effectiveness study was focused on investigating the perceived usefulness of career guidance from multiple perspectives (i.e. clients, practitioners, and witnesses). Clients found guidance as most useful when it provided access to '**specialist information**', including local labour market information, details of courses, training and employee opportunities; provided insights, focus, and clarification; motivated them; increased their self-confidence and their self-awareness; and/or structured opportunities for reflection and discussion (Bimrose *et al.*, 2008).

Modelling opportunities: Computer-Assisted Career Guidance Systems

Access to **modelling opportunities** was identified by Ryan (1999) as particularly helpful in applying self-awareness to the exploration of career opportunities.

Modelling opportunities are commonly delivered through **Computer-Assisted Career Guidance Systems (CACGS)**, which are interactive computer programmes that can be accessed and operated independently for use in self-assessment and career exploration. CACGS typically provide descriptions of occupations and associated education and training requirements, as well as self-assessment tools to help identify and model potential career matches. They are a key feature of modern career guidance services (including the National Careers Service in England), although there is **limited robust evidence of their overall effectiveness** as compared to more traditional modes of delivery.

McLaren (2014) examined the efficacy of a newly developed CACGS used alone and the same CACGS used in conjunction with a 90-minute structured workshop intervention, as compared to a 'business as usual' control group. The findings, based on a sample of 609 further and higher education students, indicated that the CACGS plus workshop condition was effective in improving career decision-making self-efficacy, and outcome expectations strivings, as well as reducing career decision-making difficulties (McLaren, 2014). Likewise, Gati and Levin (2013) asserted that when computerised assessments were incorporated into the counselling process both approaches benefited the client in their career decision-making. Their research on assessments of career indecision showed that the individual's dispositions displayed in the assessments and analysed automatically (e.g. whether an individual is more analytic in their thinking or holistic) helped to inform the counselling approach and the way the counsellor conveyed information and communicated with the individual.

These studies build on a number of previous smaller-scale studies conducted with CACGS, which suggest that whilst they represent a relatively effective form of career intervention, they are not as

effective as face-to-face interventions like individual counselling and structured groups, and are more effective when combined with a face-to-face intervention.

Attention to building support for choices

The fifth and final 'critical ingredient' identified by Ryan (1999) is **attention to building an individuals' awareness of other support on which they can draw in order to inform their career choice**. This involves discussions of the role of the familial / sociocultural environment in career development and the provision of guidance on how to make best use of this.

A five-year study looking at the effectiveness of adult career guidance services in England found that the majority of participants had agreed action plans with practitioners during their initial case study interview (Bimrose *et al.*, 2008). In the final three years of the study, however, participants' recollection of their original action plans grew vague. Analysis focussed on the plans they were actively pursuing, which did not always relate to their original action plans. Two years after the case study interview, just over half were proactively pursuing an action plans (but not necessarily their first action plan). Three years on, this use of plans had increased to 66%, but fell again to 41% in the fourth and final year. The study found that, over time, individuals had augmented or replaced their original action plans with advice and guidance from a wider range of other sources, including family and friends, colleagues, mentors and tutors (Bimrose *et al.*, 2008).

This variation in the proportion of clients pursuing action plans over time can be partly accounted for by changes in their circumstances over the five year period. However, the finding does invite some consideration of the role of action planning for adults, both in the short and longer term, with the authors stating that "[plans] *should be developed as an integral part of a learning process that the client values and owns, rather than as an instrument for practitioners or service delivery targets*".

Mode of interventions

The evidence presented above considers the effectiveness of a range of individual interventions in developing career management outcomes. These interventions may be delivered in different ways and, in the past, some research explored the relative effectiveness of different modes of delivery. These were reviewed in a meta-analysis by Whiston *et al.* (2003) who looked at studies that directly compared one form of career intervention to another. Their review excluded those that explored the effects of an intervention with a control, since these would give no indication of comparative effectiveness between modes. Their results, based on analysis of 57 studies involving 4,732 participants, suggested that:

- **Self-directed** interventions were *consistently less effective* than nearly all other forms of interventions, with the exception of standalone **computer-based** interventions
- The effects of **computer-guided** interventions were *improved substantially* if **counsellor contact** was included at some point during the computer use
- **Structured groups** were *substantially more effective* than **less structured group sessions**

Conclusions and implications

This paper has reported on the updated findings from a review of the literature on the efficacy of career guidance interventions on the development of Career Management Skills. This final section provides summary conclusions and resultant implications for the National Careers Service as it further develops and adapts to the new outcome-based approach.

The evidence from 2021 reflects that found in 2015 and does not yet point to a single intervention or group of interventions that are most effective in increasing CMS. However, it identifies **five underpinning components** of career guidance interventions that consistently have been found to substantially increase effectiveness, particularly when combined. Moreover, career guidance interventions that incorporate more than one of these elements appear more likely to be effective than single interventions in delivering career management outcomes for customers.

The evidence also highlights the relative efficacy of different modes of delivery of career guidance interventions on CMS development. It points to a possible emergent hierarchy, with interventions involving practitioner contact and structured groups being more effective than self-directed interventions or unstructured groups. It also suggests that computer-based interventions work better when practitioner input is provided during the intervention or when followed up by a structured workshop session to discuss and review the results. These findings had implications for the ‘digital-by-default’ principle of the National Careers Service in 2015, as they suggested that digital interventions worked best when combined with some form of practitioner input. It remains to be seen what the impact has been of the rapid rise of digital provision during the Covid pandemic and the subsequent more mixed-delivery economy that has resulted. To date no detailed empirical studies have yet been published on the impact of virtual activities (under Covid) on careers management skills.

The literature on ‘what works’ in relation to individual career guidance interventions is less conclusive, although does highlight a range of methods, approaches and considerations that could be useful for National Careers Service providers as they continue to develop their service offer, particularly within a more mixed delivery context (Neary et al. 2016a and 2016b). These include the use of narrative / writing approaches; the importance of providing a ‘safe’ environment; the quality of the adviser-client relationship; the need for flexibility in approach; the provision of specialist information and support; and clarity on the purpose and aims of action planning.

A key recommendation arising from this work is that the current list of career management activities / outputs that National Careers Service contractors are being paid against would still benefit from being reviewed with the aim of developing a more outcome-based approach. The body of evidence on CMS Blueprints and frameworks continues to provide a basis for informing the development of this outcome-based approach.

Annex A: Sources

The search terms were applied to the following **indexes, databases and search engines**:

- Applied Social Sciences Index and Abstracts (ASSIA)
- ASLIB Index to Theses
- Australian Education Index (AEI)
- British Education Index (BEI)
- EBSCO Business Source Premier
- EBSCO Electronic Journals Service
- Emerald
- ERIC
- Expanded Academic ASAP (via InfoTrac)
- Greynet (The Grey Literature Network Service, including the OpenGrey repository, containing over 700,000 bibliographical references to grey literature produced in Europe)
- Library Plus
- Proquest Database Collection
- PsycArticles
- PsycINFO (EBSCO)
- Social Policy and Practice (<http://www.spandp.net/>)
- Social Sciences Citation Index (SSCI) 1970-
- Social Science Research Network (SSRN)
- Sociological Abstracts
- Taylor and Francis
- Web of Knowledge
- ZETOC (Electronic Table of Contents from the British Library)

Some of the above list were searched at the same time using Library Plus and other multiple search tools.

Following the database searches, added additional references were added from previous literature-based studies and from researchers' own bibliographic databases e.g. CiteULike.

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