

A DEMONSTRATION OF THE 'TRANSACTIONAL PERSPECTIVE AS METHOD'
INTEGRATING OCCUPATIONAL SCIENCE AND IMPLEMENTATION SCIENCE

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ABSTRACT

Lauren Fowler Holahan: A Demonstration of the ‘Transactional Perspective as Method’
Integrating Occupational Science and Implementation Science
(Under the direction of Nancy Bagatell)

As the transactional perspective on occupation continues to evolve (Dickie, Cutchin, & Humphry, 2006; Bailliard, Aldrich, & Dickie, 2012; Cutchin, Dickie & Humphry, 2017), the epistemological advances toward a more communal/less individual-centered understanding of occupation beckon thoughtful methodological shifts, as well. Early research methodology associated with the transactional perspective on occupation included ethnography and participant observation, both of which continue to be widely employed and extended through new forms of qualitative inquiry and analysis. This study builds on the advancements of research grounded in the transactional perspective on occupation and makes an argument for and demonstrates the use of a methodology developed within implementation science known as a practice profile (Metz, 2016). Practice profiles are increasingly used to support implementation and/or program improvement efforts, particularly in public service domains like education and health care. In the civic forum, advantages of practice profiles over other innovation and continuous quality improvement models begin with a focus on community engagement. In addition, flexibility and responsiveness to current practice demands, clarity on required infrastructure for implementation (e.g., funding, policy, staffing), and direct linkages to measurable implementation also lend methodological power to practice profiles. Within occupational science and the transactional perspective, practice profiles offer a methodology specifically designed to examine complex group and/or organizational occupations. The organizational occupation in this study is school-

based Medicaid claiming, for which a practice profile does not currently exist, and where efforts to support excellence and innovation have mainly targeted the knowledge, skills, and dispositions of individual practitioners. Study methods included interviews, literature and document reviews, group vetting to develop the initial practice profile, and usability testing to make final refinements. Findings resulted in a practice profile for implementing school Medicaid claiming and revealed unexpected affective aspects of these reimbursement programs. The study also provided space for analyzing methodological decisions in occupational science and offered suggestions for enhancing the theoretical underpinnings of implementation science through an analysis of its alignment with pragmatism.

To the 28 counties in eastern North Carolina
declared disaster areas following Hurricane Florence.
We are still for you.

Get started. Then get better.
-State Implementation Scaling-up of Evidence-based Practice Center

You shouldn't be anxious when you don't write.
Perhaps someone writes in us then a more important text.
-Anna Kamieńska

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LIST OF ABBREVIATIONS

AOTA	American Occupational Therapy Association
CHIP	Children's Health Insurance Program
CMS	Centers for Medicare and Medicaid Services
EPSDT	Early and Periodic Screening, Diagnostic and Treatment
FERPA	Family Educational Rights and Privacy Act
FFS	Fee for service
IDEA	Individuals with Disabilities Education and Improvement Act (2007)
IEP	Individualized Education Program
LEA	Local Education Agency
MAC	Medicaid Administrative Claiming
NIH	National Institutes of Health
NIRN	National Implementation Research Network
PTO	Processes Transforming Occupations
RMTS	Random Moment Time Study
SBMPP	School-based Medicaid Practice Profile
TPO	Transactional Perspective on Occupation
UNC-CH	University of North Carolina at Chapel Hill

CHAPTER 1: INTRODUCTION AND BACKGROUND

1.1. Origins of this Study

For many years, first as a local school-based occupational therapy program administrator and then as a consultant to a state department of education, I have been surprised by how infrequently policy and/or program development efforts account for potential impact on practitioner habits. Immersion in the occupational science literature over the past eight years, with particular emphasis on Deweyan theories of action and critical theory perspectives, has only served to fuel this consternation. My experience, now encountered through transactional-colored glasses, is that, even on the rare occasion they are evidenced-based (Weiss, 1980), policies and procedures are frequently and thoroughly disconnected from the lived experience of real humans involved in real work in real time. Over the same span of years, as part of increasing participation in state-wide implementation projects related to results driven accountability (Ruggiero & Kahn, 2015), specially designed instruction (IDEA, 2004), school mental health, and school-based Medicaid, my exposure to and facility with implementation science frameworks (Fixsen, Blasé, Metz, & Van Dyke, 2013) has grown. In studying occupational science and applying implementation science simultaneously, my curiosity about the connections and complementarity of the two disciplines has expanded. While implementation science focuses on the *research-to-practice-to-research* loop and my interest, as an occupational scientist and bureaucrat, is more about the *policy-to-practice-to-policy* loop, the potential for shrinking gaps in those loops for both fields is remarkably aligned. This dissertation is an attempt to articulate and

demonstrate those linkages and common features, and to argue for future intentional collaborations among scientists in both disciplines.

Also, in conducting this investigation, I have had occasion to reflect on my near-20-year history of work as a school-based Medicaid practitioner, advocate, policy analyst, and consultant. Initially, my selection of school-based Medicaid programs as the laboratory for a blended occupational science/implementation science demonstration was a practical one: I was familiar with the literature, regulatory landscape, and stakeholders and would be able to navigate the data collection phases of the project with relative fluency. While this held true, what I have come to understand—and own—more thoroughly is that I have not allocated time, energy, wit, and a large part of my career to school-based Medicaid programs incidentally or because I was being paid. I have invested in the work because I care about Medicaid, public education, and students with disabilities and recognize the interdependent success of all three. I also perceive the success of any and all three as a matter of social justice and celebrate how each of the three—Medicaid, public education, and students with disabilities—are rich contributors to the common good. In that light, this project also represents my taking a more articulate and grounded stand for my values and what I believe to be good work. As Shank (2013) said, “Research is value-laden because the researcher discriminately focuses on what to ask, which problematic situation to address and in what way, because of personal experiences, priorities, and the circumstances under which the research is undertaken” (p. 190).

1.2. Overview

In this chapter, I will briefly introduce the essential components the project—the transactional perspective on occupation [TPO] (Dickie, Cutchin, & Humphry, 2006), implementation science, and school-based Medicaid programs—and describe how I hope to contribute both theoretically and practically across those three areas. I will articulate the

problems the study addresses via two main objectives, and close with the conceptual framework on which the project is built.

1.3. Methodological Roots of the Transactional Perspective on Occupation

The originators of the Transactional Perspective on Occupation (Cutchin, Dickie, & Humphry, 2006) come from varied disciplines and research backgrounds. Malcolm Cutchin, a human geographer and philosopher, employs qualitative data collection methods and grounded theory analysis; Virginia Dickie is an anthropologist and occupational scientist versed in ethnographic inquiry, and Ruth Humphry is human development researcher who transitioned to participant observation methods mid-career. Since 2006, research methodologies associated with the TPO have included visual methods (Bailliard, 2015; Hartman, Mandich, Magalhães, & Orchard, 2011; McCloy, White, Lee Bunting & Forwell, 2016), situational analysis (Aldrich & Rudman, 2016), critical thematic analysis (Rudman, 2013; Farias & Rudman, 2016), mapping (Rudman, 2015), and conceptual mapping (Johnson & Bagatell, 2017). While the history and rationale for methodological decisions within the TPO exceed the scope of this work, part of this project's aim is to articulate more precisely why certain forms of inquiry have historically aligned with a transactional understanding of occupation. I will also explore gaps that have evolved as a result of the methodologies chosen, and how one implementation science tool—practice profiles—may enhance and expand not only research methods within occupational science, but the transactional perspective itself.

1.4. Implementation Science

Implementation science is a field of applied research where factors impacting the full and effective use of new practices are investigated to determine what is required to achieve desired outcomes, wherein resources are allocated to ensure programs are successfully installed with fidelity to an identified model (Franks & Schroeder, 2013). Implementation is defined as:

A specified set of activities designed to put into practice an activity or program of known dimensions. According to this definition, implementation processes are purposeful and are described in sufficient detail such that independent observers can detect the presence and strength of the “specific set of activities” related to implementation. In addition, *the activity or program being implemented is described in sufficient detail so that independent observers can detect its presence and strength* (Fixsen, Naoom, Blase, Friedman, & Wallace, 2005, p.5; italics added)

Where dissemination addresses how creators or sponsors of programs impact the decisions of potential adopters, implementation concerns what adopters do. Implementation science investigates what happens after adoption occurs, especially in organizational settings (Dearing & Kee, 2013). Currently, the National Implementation Research Network (NIRN) organizes the implementation science into five frameworks—Usable Innovations, Implementation Stages, Implementation Drivers, Improvement Cycles, Implementation Teams—to investigate and demonstrate how programs, organizations, and systems address implementation factors like readiness, buy-in, installation, fidelity, and continuous improvement (NIRN, 2017).

1.4.1. Practice Profiles. One of the NIRN frameworks, implementation stages, includes four phases of effective implementation: exploration; installation; initial implementation; and, full implementation (Bertram, Blase, & Fixsen, 2015). “Practice profiles are a tool for operationalizing a conceptually defined strategy through community engagement and research methods so that it is clear what practitioners will do as they carry out the innovation” in any stage of implementation (Metz, 2016, p.1). During installation, practice profiles describe the processes, functions, components, and activities needed to implement a program undergoing development or restructuring. During full implementation, these tools serve as the basis for measuring program health and fidelity of implementation across the program, system, or organization. A fuller description of practice profiles is provided in Chapter 2. For now, in short,

this is the connection to occupational science. Practice profiles are an evidence-based affirmation of the claim that the transactional perspective is, itself, a method of social inquiry for studying occupations at the community (or organizational) level (Cutchin, Dickie, & Humphry, 2017).

1.5. School-based Medicaid Programs

The Individuals with Disabilities Education Improvement Act (IDEA; 2004) provides funding for special education and related services, like occupational therapy. Unfortunately, Congress has never allocated the originally promised 40% federal share in the excess cost of educating students with disabilities—historically calculated at about two times greater than the costs of educating general education students. Most recent data indicate the federal investment in educating students with disabilities is 16% (or \$1,843 of the \$11,534 per student) of the excess cost; the remaining 84% is left to states and local school districts to supply (Dancy, 2016).

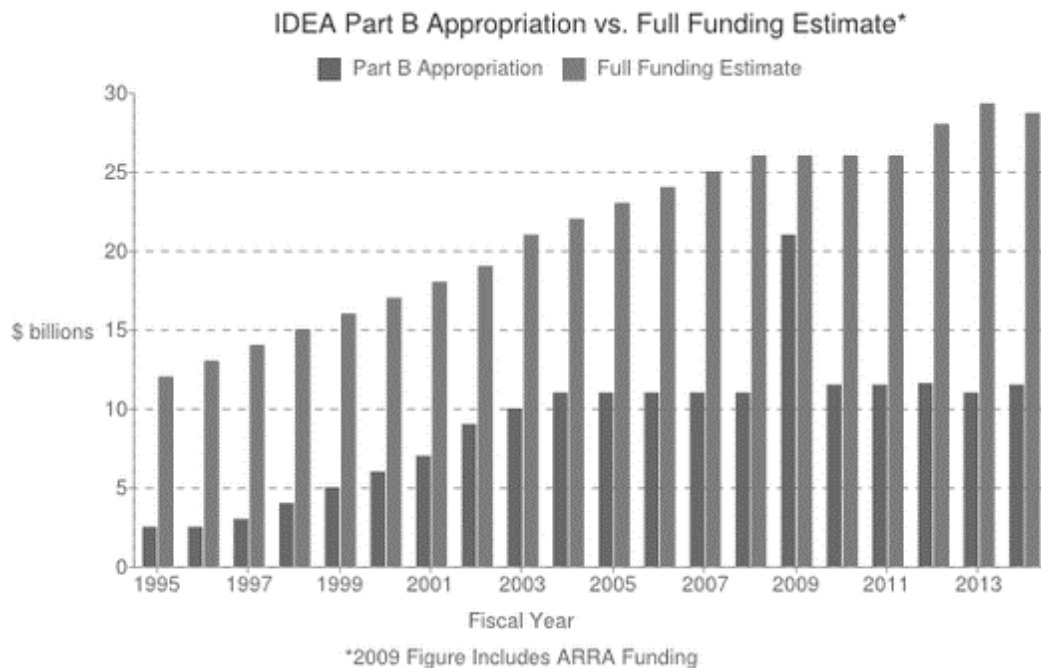


Figure 1.1. Annual IDEA Part B Appropriation Compared to Full Funding (1995-2014)

In an effort to offset the shortage in federal IDEA funding, in 1988 Congress granted access to Medicaid reimbursement for some health services provided at school with the passage of the Medicare Catastrophic Care Act (PL 100-360). As a result, annual Medicaid reimbursement to school services now reduces the \$17 billion IDEA burden on states by about \$4 billion (McCann, 2013). While Medicaid fee-for-service reimbursement of some health services provided by schools does not dispatch the entire IDEA funding deficit, it helps significantly. Further, IDEA (2004) requires Medicaid funding precede the financial responsibility of the local education agency (LEA) when providing services to Medicaid-enrolled students with Individualized Education Programs [IEP] (Sec. 300.154). As such, school practitioners and administrators can, with good conscience, participate in compliant school-based Medicaid claiming programs to sustain and strengthen this critical resource. That said, few resources exist to translate federal and state Medicaid policy into local school-based service delivery. Again, practice profiles represent an as-yet untapped mechanism for bridging this gap.

1.6. Contributions to Current Research

The contributions of this study are threefold, such that the results and analysis demonstrate: 1) an addition to the methodological tools effective for studying the transactional nature of occupation at the community or organizational level; 2) a strengthening of the theoretical base for practice profiles; and 3) the development of a practice profile for school-based Medicaid claiming.

1.6.1. Occupational Science. As mentioned earlier, this research was conducted partly in response to Hocking's (2009) dissatisfaction with broad descriptions of occupations and her launching a "strand of occupational science research that generates comprehensive accounts of specified occupations by synthesizing occupational perspectives with insights drawn from the human sciences" (p.140). The TPO has contributed mightily to developing this vision for

researching specified occupations, giving occupational scientists a framework for collecting and interpreting data not just about the individual ‘occupant,’ but about the whole socio-historical, real-time, live-action situation in which occupation unfolds and endures. This is not to suggest the actor be excluded from the description of the action, but that the action—the occupation—can and should be recognizable, regardless of who is engaged in the occupation. My dissatisfaction is that, even within the evolving transactional perspective and the recent call for community-oriented inquiry (Cutchin, Dickie, & Humphry, 2017), *how* to study the complexity of community or organizational occupations in a replicable way remains somewhat unclear. I hope to demonstrate that, not only are occupations adopted/owned/developed by communities/organizations worthy of the attention of occupational scientists, but that the practice profile methodology goes a long way toward “expanding these efforts more formally in the communities where occupational scientists live and work” (Cutchin, Dickie, & Humphry, 2017, p.9).

This research also adds to Rudman et al.’s (2008) call for expanding interdisciplinarity in occupational science. Occupational scientists have rich potential to teach and research in collaboration with other disciplines—education, anthropology, religion, organizational behavior, sociology, urban planning, human geography, public health, social medicine, and, as posited here, implementation science—so as to inform knowledge generation from an occupational perspective across the social sciences and human services. Occupational scientists can spread not only across the academy, but also out into the realms of human services, the market place, and cultural engines, applying their methods and occupational perspective to any number of social issues and opportunities. If the transactional perspective is truly a method, then occupational scientists are primed to make deep, value-added contributions to the designing of public policy,

planning communities, implementing and evaluating programs, facilitating negotiations, and crafting strategic plans, because, again, without an eye for the occupations at stake in any of these types of work, uptake and sustainability will suffer. This study is one attempt to cross-pollinate occupational science, implementation science, education, public health, healthcare financing, public policy, and organizational behavior.

1.6.2. Implementation Science. In making these contributions to occupational science, this research also has potential to enhance implementation science by bringing the theoretical strengths of occupational science to the inquiry. Obviously, practice profiles were developed within and by other disciplines (Fixsen, Blase, Metz, & Van Dyke, 2013); however, occupational science and the transactional perspective have much to offer the business of describing the facets, actions, and quality indicators inherent in the ongoing flow of an organizational occupation (Smith, 2003). The strong ontological and epistemological foundations of the transactional perspective on occupation can undergird the somewhat tacit assumptions made in the selection of implementation science methodologies. Indeed, the complexity of understanding effective practice under a unifying theoretical framework is currently limited in the implementation science literature. This study, backed by unifying transactional and occupational perspectives, would contribute directly to that need.

1.6.3. School-based Medicaid programs. Finally, the potential practical contribution of this study is enhanced Medicaid program effectiveness and efficiency in NC public schools. With a package of program features and performance standards in hand, school administrators, practitioners, families, and state agency stakeholders will have common language and a road map for beginning, evaluating, and improving school-based Medicaid programs. As part of start-up and improvement efforts, the practice profile will also provide an organizing structure for

Medicaid-related aspects of position descriptions, employee performance measures, and professional learning.

1.7. Problem Statement

Since 1988, schools have relied on Medicaid reimbursements to sustain programs for students with disabilities and to fund Medicaid outreach activities to all students and families. In 2016, the opportunity opened for Medicaid reimbursement of health services provided at school, regardless of student disability status. While state Medicaid agencies codify the terms of reimbursement to schools, their policies do not describe how optimized school-based Medicaid programs function. A practice profile for use by state and local education agencies which delineates the features of effective school-based Medicaid programs is needed to ensure the quality and sustainability of this critical funding stream in public education.

Development of this practice profile will also inform and extend the array of research methods used by occupational scientists operating from the transactional perspective, particularly those investigating community or organizational occupations, where current modes of participatory inquiry may limit application to other communities and contexts. Finally, the theoretical foundation of practice profiles has not been robustly established in the implementation science literature. The tacit assumptions about *if* a practice/organizational occupation exists and can be named, described, or defined (the ontological questions) merit articulation. *Why* and *how* to create those definitions of practice (the epistemological questions) would also benefit from a more transparent, unifying philosophical stance. Finally, *who* gets to do the defining, *what* should the definitions entail, and *where/when* the definitions are needed (the methodological questions), all bear more thorough description.

1.8. Objective and Aims

1.8.1. Objective 1: Develop a practice profile for school-based Medicaid programs.

The central hypothesis is that, with a practice profile for Medicaid programs in hand, school districts will have the capacity to establish and sustain effective, efficient, compliant, and ethical Medicaid claiming practices (which comprise the organizational occupation being investigated). In turn, those practices will yield essential funding for system resources to ensure all students attain adequate academic and functional achievement. This hypothesis is summarized in Figure 1.2 below.



Figure 1.2 School-based Medicaid Practice Profile Theory of Action

The rationale underlying the proposed project is that this research will allow state education and Medicaid agencies, district and school administrators, and practitioners to shape and measure the quality of school-based Medicaid programs. Without a practice profile—the systematic description of the organizational occupation that is school-based Medicaid claiming—school districts may rely on duplicative, incomplete, fragmented and/or ad hoc processes based on local, anecdotal knowledge and interpretation of policies. The expected outcome will be an evidenced-based practice profile, which, when employed, will positively impact the health, well-being, learning, and occupational performance of students with and without disabilities.

1.8.2. Objective 2: Enhance the array of research methodologies suitable for and aligned with the transactional perspective on occupation and enhance the theoretical base in implementation science. While Objective 2 may appear to be two separate objectives and in

need of parsing, the combination is intentional and critical to the second hypothesis driving this research, which is: occupational science and implementation science share many epistemological positions, aims, and outcomes which, when paired, will yield research findings potentially more salient, translational, and well-reasoned than if pursued separately. Although the language used for central—and similar—constructs varies in each discipline, blending strengths from occupational science (e.g., thoroughly articulated theoretical foundations) and implementation science (e.g., proven methodological frameworks with readily translatable outcomes) holds significant promise for collaborations and enhancements in both fields. This is to say, the alignment of the two disciplines bears analysis and this project initiates that inquiry.

1.9. Conceptual Framework

As a holist with qualitative sensibilities, convinced of the inseparable nature of actor (including researcher), action, and context, the participatory paradigm as set forth by organizational behavior scholars, John Heron and Peter Reason (1997), is my starting place. This paradigm seeks to “move away from the mechanical abstraction of the Cartesian worldview, and from the relativism that appears first as its counterpoint, to an experience of participatory reality” (p. 275). The participatory worldview holds reality is *both* subjective *and* objective and that human knowing is based on active engagement with a given cosmos. This encounter with the cosmos or community is transactional insofar as “our subjectivity feels the participation of what is there and is illuminated by it” (p. 279). Further, what can be known is only knowable in the company of other knowers; to wit, people need to participate with one another in the world as they know it—through shared language, culture, beliefs, values, and experiences—to arrive at anything like communal agreement on what is real.

Heron and Reason’s (1997) development of the participatory inquiry paradigm includes consideration of not only ontology, epistemology, and methodology, but axiology as well. By

including reflection on what is deemed worthy of attention—by asking the question “What human states are to be valued simply by virtue of what they are?” (p. 286)—scholars admit and take responsibility for the knowledge they generate. This is not simply a consideration of methodological ethics; this is about starting inquiry with an end-in-view (Dewey 1938/1963), imagination, passion, and involvement. In the participatory paradigm, the practical goal of research is human flourishing, such that humans will better know “how to choose and act—hierarchically, cooperatively, and autonomously—to enhance personal and social fulfillment and that of the eco-networks of which we are a part” (p. 287). The proposed study emerges, fundamentally, from the desire for:

- Schools to have the resources to meet the health needs of students
- Students to be healthy enough to be appropriately educated
- Families to experience collaborative, supportive partnerships in raising and educating healthy children

The other epistemological view driving my work is, as previously stated, the transactional perspective on occupation (Cutchin & Dickie, 2013), which connects my thinking as an occupational scientist and the addition of practice profiles as one of the discipline’s accepted methodologies. A transactional lens sees people, practices, and their environments as one ever-evolving, inseparable whole, which makes the entire situation, rather than its component parts, the unit of analysis (Rosenburg & Johansson, 2013). Similarly, practice profiles move away from strict empiricism, reductionism, and scientific management/Taylorism, which were born and perfected in early- and mid-century mass-production industries and improved a company’s bottom line through studying and implementing the most efficient, aseptic ways for humans to do a very specific job or set of practices (Lawler, 1994). However, the market and our

understanding of human performance have changed at a staggering pace, especially in the last twenty years, and traditional job analysis no longer provides durable, competitive, relevant, or flexible enough descriptions of what occupations are required for an organization to be successful. Practice profiles are transactional, dynamic, context-dependent ways of situating organizational occupations as co-constitutive of organizational performance. They dispatch with the notion of the abstract ‘job’ (Acker, 1992) and rely instead on action-oriented, day-to-day policies, processes, and practices informed by stakeholders’ unique and ever-emerging interpretation of what contributes to the mission of the organization writ large (Sanchez & Levine, 2009). This local, real-time interpretation of practice addresses one of the current realities of most organizational occupations, and particularly those that are complex and extend over time and often across a variety of settings; namely, dealing with ambiguous situations (Epstein & Hundert, 2002; Rubin, et al., 2007). In the practice profile view, practices are conceived of as bundles of resources, affordances, and expectations which, in effective implementation, are continually re-combined to meet the need of the moment. It is not a stretch to suggest this very closely parallels Dewey’s theory of how habits enable us to functionally coordinate indeterminate situations (Holahan, 2013).

From the implementation science perspective, functional coordination can be understood as the interplay of three non-negotiable elements: innovations (or practices), implementation, and contexts (Metz, Barkley, Fixsen, & Blase, 2011). Each element is essential for coordinating situations toward positive or desired outcomes which cannot be achieved if one or more is missing. Practice profiles, and this study, encompass all three elements as they describe exactly what practice is being implemented (effective innovation or occupation), how the practice is

installed and sustained (effective implementation), and what system features and resources are needed to house the practice (enabling contexts). See Figure 1.3 below.



Figure 1.3. Multiplicative Correlation of Functional Coordination (Fixsen, Blase, Metz, & Van Dyke, 2013)

Again, practice profiles differ from classic job analysis in that they directly link to the organization’s mission/language/culture and are designed to distinguish practice at different levels of proficiency (Campion, et al., 2011). This methodology also rests on the premise that the most compelling evidence for understanding how well an occupation is being functionally coordinated can only be gathered through ongoing development, evaluation, and refinement in practice amid diverse populations and systems. As such, it is only in and through local application that adjustments to organizational characteristics (e.g., culture, climate, structure) can be made to improve fit between the practice and the setting. Similarly, it is only in harnessing an understanding of context that beneficial adaptation of the practice or organizational occupation can be designed and sustained (Chambers, Glasgow, & Stange 2013).

If graduating healthy, whole, college- and career-ready students is one view of public education’s mission, then practice profiles may well be an apt approach for defining what occupations within a given school program will yield desired results. Given the complex web of law, policy, politics, educational research, school and community culture, and practitioner knowledge, skills, attitudes, and dispositions that inform programs and practices, school employees need a roadmap for how to demonstrate their contribution to the public school bottom line (e.g., student achievement). School-based Medicaid programs must demonstrate they

enhance the academic and functional achievement of all students: practice profiles start with student health and achievement in mind and make space for studying, describing, and documenting specific practices—those associated with school-based Medicaid programs in this case—in a coherent, sustainable, and valuable way.

CHAPTER 2: LITERATURE REVIEW

In this chapter, I will trace similarities in the emergence of occupational science and implementation science and their respective methodological evolutions. If a life course theory approach (Elder, Johnson, & Crosnoe, 2003) can be applied to an understanding the evolution of disciplines, such is my aim. From there, I will provide a history of the Medicaid program, sketch how public schools came to be Medicaid providers, and describe the regulatory and practical quagmire that resulted from mixing educational and medical models of service delivery. Combined, the literature considered will demonstrate how this research is situated within and may contribute to occupational science, implementation science, and public education.

2.1. Emergence of Occupational Science

Yerxa (2000), a founding occupational science scholar, advanced the notion that occupational science originated in altruistic response to shrinking government care for increasing numbers of people with chronic impairments who society needed to see as nonetheless healthy and worthy of inclusion. Describing how people with chronic impairments organized time, activities, and roles would demonstrate their ability to achieve occupational competence and, thus, reduce marginalization based on ability level. A science would be needed to generate such descriptions, and from the ranks of occupational therapy professors, such a science was born in 1989.

My perspective, informed by the privilege of 30 years of hindsight and access to astute commentators, is somewhat less storied. The tremendous economic and social upheaval of late 1980s-early 1990's imbued American culture with a frank suspicion of established organizations,

professions, and businesses; shattered confidence in the stock market and most financial institutions had a far-reaching impact on what the public felt it had a right to know. The disgruntled American consumer began to demand evidence, ethics, accountability, and proof of effectiveness across service sectors. In the midst of that economic crisis, managed care had failed to improve healthcare quality, patient choice or access, and, as a result, the concept of healthcare “value” emerged (Zinner & Loughlin, 2009). Concurrently, licensure and regulation of healthcare professions rapidly expanded and the standard of evidence-based care was born (Claridge & Fabian, 2005). My sense is, leaders in occupational therapy were reading the spirit of the times and that Yerxa et al., (1990) introduced occupational science to occupational therapists, researchers, and educators in response to a growing sense that the profession needed its own legitimizing disciplinary knowledge set to remain viable, respected, and funded. As such, in 1989, the University of Southern California admitted the first class into its PhD program in Occupational Science (Pierce, 2014). A parallel professional evolution was also occurring in Australian occupational therapy circles, and, in 1993, Ann Wilcock founded the *Journal of Occupational Science: Australia*.

Since then, the growth of occupational science has been marked by the development of five PhD programs in occupational science, several bachelor-level degree programs, a robust journal, several textbooks, and several nationally-based research societies (Pierce, 2014). In 2009, Glover analyzed the discipline’s maturation with additional salient facts: most (65%) occupational science knowledge at the time was housed in the *Journal of Occupational Science* (JOS) or occupational therapy journals; most authors were occupational therapists or scientists from Australia, US, and Canada; about half of occupational science articles were discussion

related, and those that were research reports tend toward qualitative methods looking at adult occupations; and, about 25% of JOS articles investigated occupations related to disability.

2.1.1. Methodological Paths in Occupational Science. According to Clark, et al. (1991), occupational science is the systematic, multi-dimensional study of humans as agentic, active beings, fired by the drive for efficacy and competency, who pursue and orchestrate symbolic activity through the life span as a way to create meaning. Early contributors posed that, while occupational science would need to address the substrates, form, function, meaning, symbolic systems, sociocultural-historical contexts of occupation, as well its structures and processes of social organizations, the main focus of inquiry would be the self-determined individual who chose particular occupational engagements (Clark, et al., 1991). Similarly, Yerxa et al. (1990) promised occupational science would help occupational therapists reckon with client incapacity by building a knowledge base around capacity through detailed descriptions of the rules, habits, skills, organization, and flow of occupational engagement. In short, Yerxa and her colleagues put forth the notion that occupational science would build a researched catalog of 1) the experience of the individual engaged in occupation, 2) the meaning a person attached to and derived from a given occupation, 3) the goals pursued, and 4) the competence felt and accumulated by a person engaged in occupation. While these early descriptions of the discipline reflected an important interest in *what* occupational science would be, they did not go very far in explaining *how* that systematic cataloging would be done (or how the knowledge generated would be disseminated and implemented). Was the assumption, methods used by occupational therapists evaluating a client—interview, observation, and administration of selected standardized assessments—would naturally translate into suitable research methods for investigations of occupation?

Ten years into the life of the science, Whiteford, Townsend, & Hocking (2000) suggested occupational science arose from a collective desire to return to the roots of the profession—occupation—because a post-modern lens called for inquiry into the occupations of the marginalized and the ways in which power structures controlled occupational possibilities. Less concerned with this critical perspective, Hocking (2009) suggested a practical “stock take” of occupational science following its first decade by clarifying the discipline’s most prominent lines of inquiry. She identified three categories of investigation that characterized and set occupational science apart from other social science disciplines, namely, studies that described 1) essential elements of occupation (its nature, prerequisites, structure or features, symbolic meaning, and how occupational forms have come to be historically and culturally embedded, 2) dynamic occupational processes (observable behaviors, subjective experience, changing emotional responses, the influence of instructions, changes effected in the environment and how occupational performance shapes identity, and, 3) the relationship of occupation to other phenomena (health, quality of life, beliefs, a sense of competence, social structures and policies, and how occupation bridges doing, being, and becoming).

Still, the conversation remained on *what* occupational science was rather than *how* it is was done. By the mid-2000s, growing unrest with the both individual-as-unit-of-analysis and occupation-as-fixed-describable-noun perspectives launched an era of considerable self-reflection within occupational science. At the University of North Carolina at Chapel Hill (UNC-CH) Humphry (2005) posited the Model of Processes Transforming Occupations (PTO) model, demonstrating how occupations change over time and why the discipline needed to adopt a more developmental perspective on occupational form and performance. In this view, occupations are not so much selected and controlled by the individual, as they are socially constructed, culturally

determined, and acquired. As such, occupational engagement is not based solely on agentic volition and choice; rather, communities create emergent, learned, negotiated, and dynamic opportunities for participation and performance. Interestingly, Humphry, whose program of research in human development had been rooted in quantitative methods, put forth and further developed the PTO as she began working with more qualitative methods of investigation. Down the hall, Dickie, an anthropologist and occupational therapy scholar, whose facility with ethnographic methods had taken her into quilting communities in North Carolina, was wrestling with the socially situated layers of occupation and meaning her consultants were expressing (2003). At the same time, Cutchin, a human geographer versed in the use of interview, focus groups, and participatory methods (1997, 2003) in his work investigating place integration of rural physicians and older adults, had begun to question the prevalence of individualism in occupational science scholarship (2004). In 2006, these three UNC-CH colleagues, Cutchin, Dickie, and Humphry, offered an alternative perspective on the nature and study of occupation—transactionalism—borne of Deweyan pragmatism and promoting the continuity of person and environment through functional coordination. Cutchin and Dickie (2012) reminded those interested in occupation that the founding father of occupational therapy, Adolph Meyer (1977 reprint of 1922 article), was deeply influenced by his contemporary, John Dewey. Transactionalism, then, brought the history and study of occupation full circle, expanding the singular notion of humans as occupational beings to human occupation as a holistic enterprise in which all parts of a situation are co-constituting (Cutchin & Dickie, 2012). In this new/old view, the occupational scientist focuses on the action inherent in the relational negotiation of a problematic situation, highlighting how occupation happens instead of attempting to define what it is.

Following this significant development in the theoretical foundation of occupational science, Hocking (2009) argued for a study of occupation distinct from people's engagement in it, (i.e., a study of the action-in-action) based on the notion that, in order to draw conclusions about occupation in general, non-normative descriptions of particular occupations are needed. These specific analyses of diverse occupations would synthesize data from self-report, observation, and physiologic methods. Hocking also promoted the consideration of context in the study of occupation, both in terms of its support and influence on occupation and the impact occupation has on the environment (a consideration I call an "occupational footprint"; Holahan, 2013).

2.1.1.1. Methodological Transactions of the Transactional Perspective on Occupation.

As the transactional perspective developed, a reflexive, indeed, transactional sequelae of methodological concerns and conversations was set in motion. If the situation, rather than the individual, is the unit of analysis (Rosenberg & Johansson, 2013), what are the most appropriate and illuminating forms of data collection and analysis? Or, as Shank (2013) suggested, how is a "philosophical emphasis on continuity and contingency of the world instantiated in research methodology" (p. 191)? To date, the responses have been drawn largely from social science qualitative methodologies that make room for exploratory (rather than confirmatory) inquiry. Open and semi-structured interviews, focus groups, longitudinal participant observation, other ethnographic methods (e.g., taking field notes, photographs, recordings; analyzing documents and artifacts) which apprehend occupational situations as cultures (Bailliard, Aldrich, & Dickie, 2013), and critical discourse analyses to articulate the transactional influence of underlying power structures and discourses connected with a given occupation (Rudman, 2006) have been prevalent methodological approaches. More recently, research methodologies associated with the

TPO have included visual methods (Bailliard, 2015; Hartman, Mandich, Magalhães, & Orchard, 2011; McCloy, White, Lee Bunting & Forwell, 2016), situational analysis (Aldrich & Rudman, 2016), mapping (Rudman, 2015), and conceptual mapping (Johnson & Bagatell, 2017). Finally, in further development of the TPO, Cutchin, Dickie, and Humphry (2017) called for extended forms of inquiry and suggested the TPO is, itself, a method useful for informing research and practice at the community level.

Given the many and varied ways occupational scientists continue to investigate and interpret occupation, some scholars (Kinsella, 2012; Rudman, et al., 2008) have called for increasing epistemic reflexivity as the discipline weighs future theory choice and knowledge commitments. Rudman, et al. (2008) have argued that if occupational science is to survive and flourish, its disciplinary culture has to embrace differing points of view, multiple definitions of occupations, and multifaceted methods of inquiry. This reflexivity would push occupational scientists to consider the values they hold regarding what constitutes knowledge and admit that, given the diversity in perspectives, pluralistic knowledge paradigms and claims are likely the discipline's best bet (Kinsella, 2012). From this open, reflexive posture, occupational science would engage in lively discussions which expose and problematize assumptions so it could better understand the complexity and contextual features of occupation. Farias and Rudman (2016) push this reflexive argument even further, inviting scholars "to question and re-vision the broader role of occupational science in addressing social issues in practice, research, and scholarship" (p. 42). It is out of this encouragement toward both reflexivity and outward scholarship-as-service that I turn to implementation science as a promising, transactional partner in sustaining and expanding the science of occupation.

2.2. Emergence of Implementation Science

While implementation has been a recognizable feature of the diffusion of innovations paradigm since the mid-1950s (Dearing & Kee, 2012), the timing of the emergence of implementation science is closely and interestingly aligned with the brief history of occupational science outlined above. Many scholars point to the powerful and widespread impact of the 2001 Institute of Medicine report, *Crossing the Quality Chasm*, as one impetus for a unique science dedicated to investigating how best to translate research findings into routine practices (Proctor et al., 2009). In response, Greenlagh et al., (2004) conducted a large-scale systematic review of diffusion practices in services organizations and found that evidence associated with implementation was lacking, complicated, and difficult to extract from research on processes like change management and organizational development. Research and practice organizations across health care and education sectors, especially, took up the call for a more focused inquiry into what conditions and mechanisms made for successful and sustainable practice change.

In 2005, the National Institutes of Health (NIH) issued its first set of multi-institute program announcements on dissemination and implementation research. In 2006, the first issue of *Implementation Science* was published (Proctor et al., 2009). The first *NIH Dissemination and Implementation* conference was held in 2007, and in 2010 NIH established a standing review committee for Dissemination and Implementation Research in Health (Glasgow et al., 2012). At the same time, funding for research projects in public education designed to examine how research was being used to inform policy and practice in local schools began to emerge (Tseng, 2012). Fixen, Blase, Metz, and Van Dyke (2013) trace the diffusion of implementation science methods effective in installing and sustaining evidence-based practices in educational settings. Their work has been critical in illuminating how state and local education agencies are increasingly collaborating with researchers to move educational reform from “letting it happen”

or even “helping it happen, to “making it happen” (p. 214). Intriguingly, as scholarship accrued in implementation science and related forms of inquiry (e.g., dissemination science, knowledge translation, and technology transfer), researchers began to recognize:

Knowledge use is transactive. Although one may use the analogy of 'transfer,' knowledge is never truly marketed, transferred or exchanged. Knowledge is really negotiated between the parties involved...In other words, the notions of transaction, negotiation, interactions, and synthesis are key to the conceptualization of transfer (and dissemination/diffusion) of information/knowledge from producers to users...Utilization properly involves both the logics of innovation producers and the experiential expertise of users who are sensitized to issues of context and compatibility. (Dearing & Kee, 2012, p. 17, 20).

The point of this short history of implementation science is to demonstrate both occupational science and implementation science have emerged in the same socio-historical moment in response to similar system pressures to produce, disseminate, install, and sustain evidence-based practices in and across human service outlets. Further, both disciplines have come of age in the midst of massive and rapid shifts in communication technology. Distribution of evidence-based and best practices has accelerated, access to research findings has improved, connection across practitioners has intensified, and feedback loops from practitioners/end-users to innovation creators have become commonplace (Dearing & Kee, 2012).

Currently, the National Implementation Research Network (NIRN) is one of the primary creators, organizers, and disseminators of implementation science knowledge and practice. Since 2013, NIRN has rapidly established an extensive research portfolio and clearinghouse of implementation resources. As mentioned in Chapter 1, these resources have been organized around five implementation frameworks and, within each framework, multiple planning and action tools have been developed. Among them, NIRN's emerging practice profile methodology (Metz, 2016) serves as platform for my demonstration of the current and potential future linkages among occupational science and implementation science.

2.2.1. Practice Profiles. As previously stated, practice profiles define the essential operational features of a program or practice; they crisply articulate occupation-in-action and occupation-in-context based on stakeholder input gathered and analyzed by researchers. The basic structure of a practice profile begins with the values and philosophy—or the compelling “why” (Sinek, 2009)—community members have identified about a given innovation or program (Metz, 2016). Next, to ensure all program components are “teachable, learnable, and doable,” three strata of program performance and examples of each level are defined (Fixsen, Blase, Metz, & Van Dyke, 2013, p. 219). The performance strata are: *expected* (the program is achieving intended results); *developmental* (the program trajectory is promising); and *unacceptable* (the program will not meet intended results with this performance/trajectory). From there, the practice profile organizes a program or innovation into core elements which are broad categories (nouns) of non-negotiable features that must be observable and observed to say the innovation is being used. Generally there are no more than five or six core elements, given the goal is to describe a package of activities that can be taught, apprehended, and enacted (Hall & Hord, 2014). Within each core element are precise operational definitions of the actions practitioners engage (verbs) when the innovation or program is functioning as intended; these definitions are called Critical Components. Each critical component is scaled for assessment using the aforementioned details in the performance strata for each component. Figure 2.1 illustrates the structure of a practice profile.

Core Element Title (For example: <i>Doctoral Research & Writing Phase</i>)					
Description of what data and processes will be considered in assessing performance of the program element. For example: <i>For this Core Element, consider how the PhD candidate develops, improves, sustains implementation of, and creates an enabling context for the research and analysis phase of the PhD program.</i>					
Critical Component	Expected Implementation (Rate as 2)	Developmental Variation (Rate as 1)	Needs Improvement (Rate as 0)	Rating	Documentation and Comments
For example:					
<i>The dissertation proposal, research, project narrative, and defense are completed in a timely and coherent manner.</i>	<i>A single project is proposed/ approved, implemented, and completed within 2 years of the proposal being approved.</i>	<i>The project focus changes once and/or the research and writing phase takes 2-4 years following proposal approval to complete.</i>	<i>The project focus changes more than once and/or the research and writing phase takes more than 4 years following proposal approval to complete.</i>	<i>0 !</i>	<i>Due to external demands (i.e., employment and family obligations), shifting values, and large-scale distractibility, the project has encountered significant deviation in overall implementation. That said, the dissertation appears to be miraculously near completion.</i>

Figure 2.1. Example of a Practice Profile

Practice profiles provide an aspirational picture of a given initiative; even at the full implementation stage, few if any programs meet all expectations when analyzed with the tool. Further, many programs that are new or in transition may not have all the data needed to respond to each critical component. Still, these instruments can be useful in assessing organizational strengths, resources, and areas needing improvement at any stage of implementation. Practice profiles are not intended for program regulatory compliance measurement, but they can be an effective means of building and assessing system and staff capacity for staff implementing a given program.

2.3. The Methodological Connection

From an occupational science perspective, practice profiles can provide a structure for a community or collection of stakeholders to create a consensus definition of an occupation, such that everyone can reliably and agreeably say, “Yes, the thing we are observing is _____

[insert occupation the community cares about here]” when that occupation occurs. Further, the delineation of performance strata enables stakeholders to locate how competently the program is functioning at any point in its implementation. This aligns with what I have argued previously:

Occupation may be seen as what, how, and why things are done and competence may be seen as the quality with which the what, how and why unfold. Even here the distinction may be overstated, because, while competence and occupation are not the same, one might argue that an occupation incompetently performed is, in fact, not that occupation. Occupation needs competence in order to be, by definition, occupation. Competence, then, is the extent to which the coordination of occupation is acceptable, agreeable, and reliable across the organism-in-environment-as-a-whole. It is, in short, a sign of transactional fit. (Holahan, 2013, p.11)

At the organizational level, development of a practice profile using consensus for decision-making promotes ownership and uptake of a given practice, or what I am suggesting be recognized as an ‘organizational occupation.’ The term *organizational occupation* is not currently found in the occupational science literature; one of the outcomes of this project may be an argument for its inclusion in the discipline’s lexicon. Perhaps the closest documented concept would be *complex co-occupation* (Pickens & Pizur-Barnekow, 2009); however, this term lacks specific anchoring to an organization, where occupations are often codified to ensure consistency of performance to meet organizational goals. Further, organizational occupations can be engaged in by one person, which is counter to an understanding of co-occupation, where action is shared among two or more people. The idea of organizational occupations aligns with Hocking’s (2009) effort to “conduct research and scholarship dedicated to generating knowledge of occupation itself, rather than people’s engagement in it” (p.140). In this view, the use of a practice profile to classify occupations at the programmatic or organizational level (e.g., school-based Medicaid claiming) may add a new wrinkle to the understanding of an *occupational profile* (AOTA, 2014), which has traditionally been associated with a particular person, rather than a particular occupation. I will return to this reconceptualization of occupational profiles in Chapter 5.

Once established, a practice profile can facilitate growth toward organizational and practitioner competence in the identified occupation because its components have been operationalized. The practice profile thus provides the building blocks for internal systems, processes, and practices; external partnerships; and, competency-based recruiting, hiring, training, coaching, and performance assessments to support implementation of the occupation (Metz, 2016). And, because they are aspirational in nature—defining not *any* practice, but *competent* occupational performance—practice profiles set the stage of improvement planning by allowing an organization to assess current performance and then mapping a course to the competence standard. Similarly, evaluation of an organizational occupation is enhanced because outcomes can be linked to the well-defined nature of what exactly was implemented. An example of this can be found in the well-known case of implementing hand-washing in patient care facilities: once this organizational occupation was clearly defined (e.g., use a waterless antiseptic agent, make antiseptic readily available, prohibit artificial fingernails, etc.; Larson, Quiros, & Lin, 2007), health care-associated infection rates before and after implementation of the occupation could be compared.

Finally, and perhaps most interestingly for occupational scientists working from a transactional perspective, practice profiles assume and invite local adaptation and optimization of occupations in real-time, real-life situations. In other words, “the practice profile methodology provides a concrete strategy for factoring in the dynamic interplay between characteristics of the service system, service delivery organization, and local communities.” (Metz, 2016, p. 3). By providing definitions of acceptable program variations, and by encouraging the organization to consider contextual forces which may be driving needed adjustments, practice profiles create an

infrastructure for the centerpiece of Dewey’s notion of transaction: functional coordination.

Chambers, Glasgow, and Stange (2013) suggest this negotiated coordination

will likely change over time, due to changes in the way in which an intervention is delivered, the characteristics of patients, providers and settings, and the broader ecological system within which healthcare settings reside. Attention to this fit, through ongoing assessment and quality improvement efforts, should improve sustainment and ultimately identify opportunities for intervention improvement (p. 6).

This project is an effort to demonstrate how functional coordination within organizations—in this case, school districts—can be reliably studied, described, and packaged for replication. Before presenting the details of the study, however, a review of the literature and landscape of school-based Medicaid programs is provided to depict the organizational occupation profiled in this project.

2.4. School-based Medicaid Programs

2.4.1. History and Overview of Medicaid. Medicaid, a joint federal-state public health insurance program administered by the Centers for Medicare and Medicaid Services (CMS), was established by Congress in 1965 as part the Johnson administration’s Great Society vision. Today, the program serves more than 73 million individuals in low income working families, older adults, and individuals with disabilities (CMS, 2018). Children and youth represent 50% of all Medicaid enrollees, but account for just 19% of total Medicaid spending, which reached \$545.1 billion in 2015 (CMS, 2017). Currently, Medicaid spending represents less than one-fifth of the total National Health Expenditure in the United States and costs less per enrollee than employer-based insurance (Coughlin, 2013).

Two years after the original Medicaid program was established, Congress added the Early and Periodic Screening, Diagnostic and Treatment (EPSDT) benefit for children under the age of 21 who are enrolled in Medicaid. EPSDT supports age-appropriate medically necessary screening, preventive services, and treatment services to address any identified conditions and to

ensure children and youth receive the right care at the right time in the right setting (CMS, 2014). In 1997, the Children's Health Insurance Program (CHIP) was established to make possible coverage for children and youth living in families with incomes exceeding Medicaid thresholds, but who cannot afford private coverage. States have considerable flexibility in how they manage their Medicaid, EPSDT, and CHIP programs and leverage the federal share (57% national average) of funding covered services (Snyder & Rudowitz, 2015). Each state codifies its array of Medicaid services and rules for coverage in a CMS-approved state plan and subsequent amendments.

In terms of the 37 million children enrolled in the program, the Medicaid investment has improved health outcomes, reduced disparities in access to health care, and Medicaid enrolled children experience enhanced academic achievement and greater future earnings (Brown, Kowalski, & Lurie, 2015). Children covered by Medicaid during their childhood also experience fewer hospitalizations and emergency room visits, are more likely to graduate from high school and college, have higher wages, and pay more in taxes as adults (Wherry, Miller, Kaestner, & Meyer, 2015). In most states, covered services include pediatric primary and specialty care, care for children and youth who are medically fragile to support living at home rather than in institutional settings, evidence-based therapy services, and transportation support to/from appointments (Cuello, Reid, & Turner, 2017).

2.4.2. Medicaid in Schools. As of 1988, State Medicaid entities are required to allow LEAs access to Medicaid-enrolled students' benefits for covered, medically necessary services provided at school, given all other program requirements are met and before any IDEA funds are used. Many students with disabilities require costly health and therapy services in order to be

appropriately educated. Medicaid reimbursement for those services reduces special education costs and supports limited education budgets, overall (Schubel, 2017). See Figure 2.2.

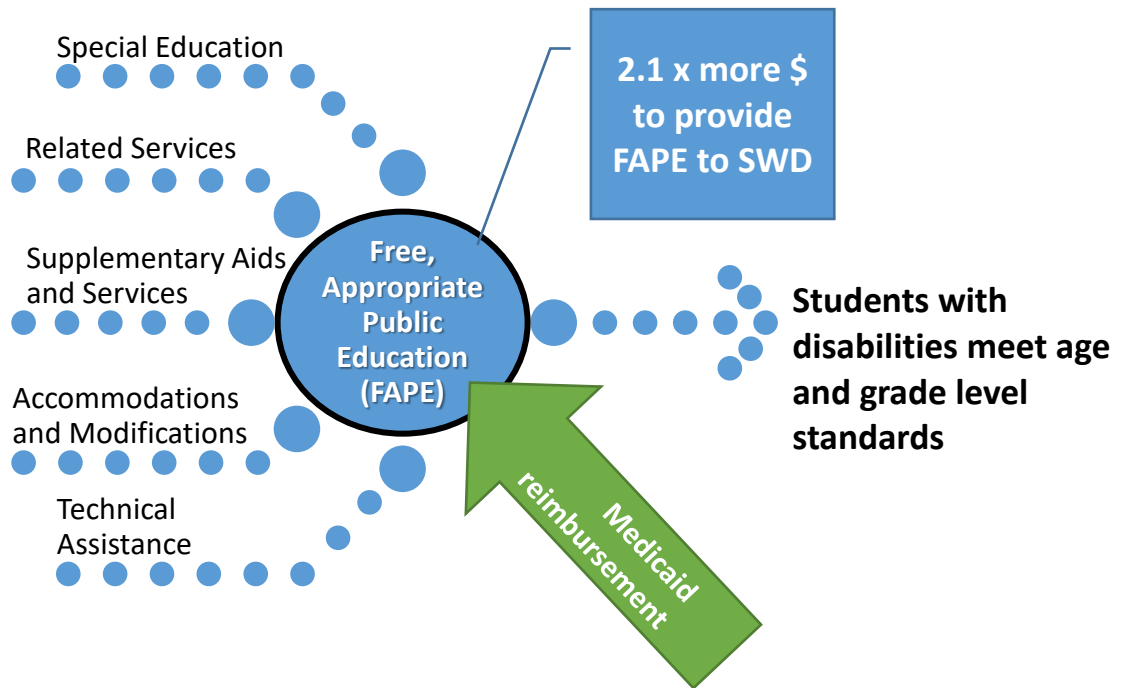


Figure 2.2. How Medicaid Supports FAPE

In addition, in 2014, CMS reversed a long-standing position (the “free care” rule), that prohibited reimbursement for school health services provided to any student (e.g., dental, vision, and hearing screenings). As such, schools may now seek reimbursement for health services named under the Medicaid state plan or EPSDT for all Medicaid-enrolled students, regardless of IDEA eligibility. Funding for Medicaid services provided by schools generally takes the form of fee-for-service payments, as well as support for Medicaid administrative outreach expenditures. Combined reimbursements through the various school-based programs tally less than 1% of the overall federal Medicaid allocation (Pudeleski, 2017). These programs are described in detail below.

2.4.2.1. Fee for Service (FFS). Medicaid fee-for-service policies vary from state to state. All state Medicaid agencies that reimburse schools for services provided to Medicaid-enrolled

students include occupational therapy, physical therapy, and speech-language pathology on their lists of covered services. As such, many administrators, families, and school therapy practitioners will have occasion to interface with the Medicaid program. When a therapy is covered, services are typically defined as evaluation, re-evaluation, and direct intervention. Very few states reimburse consultation activities, like time in IEP meetings and collaborative planning with parents, teachers, and other team members.

Common Medicaid requirements for reimbursement of services provided by schools include:

- The service is a covered Medicaid service, paid at a rate set by an approved methodology;
- Service is provided to a Medicaid-enrolled student;
- The LEA and/or the practitioner is a recognized Medicaid provider, meeting all federal and state provider qualifications;
- Service is medically necessary;
- Services are not duplicative;
- Providers maintain auditable documentation to support claims;
- The state conducts appropriate financial oversight of provider reimbursement (e.g., audits);
- All other program requirements are met

Additional program requirements specific to school-based fee-for-service clinical coverage policies may include obtaining physician orders for school services and/or ensuring the service is documented in a formal plan (e.g., IEP, Section 504 plan, behavior intervention plan, individual healthcare plan). Further, in compliance with the Family Educational Rights and Privacy Act (FERPA, 20 U.S.C. § 1232g; 34 CFR Part 99) and IDEA (300.154.d.2.iv), LEAs

must obtain one-time parental consent prior to releasing student personally identifiable educational information to the Medicaid agency when recovering costs for rendered services. The consent and required annual notification must also ensure the parent understands consent is voluntary and does not expire unless the parent revokes it, which he/she may do at any time. Medicaid-reimbursed services provided at school cannot affect a student's other Medicaid benefits or result in cost to the family.

2.4.2.2. Medicaid Administrative Claiming (MAC). An estimated 5% of children under age 18 in the US are uninsured; most of these are school-aged students, and almost all are eligible for Medicaid (Clarke, Norris, & Schiller, 2016). Schools are in a unique position to help enroll eligible-but-unenrolled children in Medicaid or CHIP and connect them to other health care services and providers (CMS, 2003). This is both a public health and a public education opportunity: when children are healthy, they perform better on indicators of achievement including academic performance, attendance, grades, cognitive skills, attitudes and in-class behavior (Walker, Kerns, Lyon, Bruns, & Cosgrove, 2010). Having health insurance is a primary determinant in overall health.

To that end, federal matching Medicaid funds are available to schools through the Medicaid Administrative Claiming (MAC) program to support the cost of administrative activities aimed at identifying and enrolling eligible children and youth into Medicaid. If school resources are used and employees perform administrative activities that are in support of the state Medicaid plan, federal reimbursement may be available (CMS, 2003). Activities in support of Medicaid might include educating parents and students about Medicaid, assistance with Medicaid applications, and assistance in accessing services both at school and in the community. In most states, a quarterly random moment time study identifies the extent to which select

employees (therapy practitioners are commonly selected) are engaged in Medicaid supportive activities. Compliance with MAC program requirements is a prerequisite to accessing fee-for-service reimbursement in many states, given MAC data are often used to calculate the fee-for-service rates.

2.4.2.3. Cost Settlement. In many states where Medicaid school-based MAC and fee-for-service programs are aligned, an annual cost reporting mechanism exists to ensure LEAs are neither under- or over- paid for their expenditures for Medicaid-enrolled students (NC DMA, 2017). Through the cost settlement process, LEAs determine the actual cost of delivering direct medical services (e.g., salaries, materials/supplies, depreciation) to Medicaid beneficiaries. If the LEA annual expenditures exceed what was received in reimbursement, the state Medicaid agency makes up the difference; if the LEA annual expenditures are lower than what was received in reimbursement, the state Medicaid agency recoups the overage. While the technical aspects of cost settlement exceed the scope of this discussion, it is important stakeholders to understand that, through processes like cost reporting, LEAs do not incur a profit in their Medicaid programs and do not “double dip” in federal funding.

2.4.2.4. Post-Payment Reviews/Audits. All state Medicaid agencies are required to maintain program integrity for each policy covered in the Medicaid state plan, including LEA claiming programs. States have flexibility in how monitoring claim validity is conducted, and, as such, considerable variation exists. Many states audit randomly sampled claims by requesting the LEA produce all documentation associated with the claim (e.g., evaluation report, plan of care, progress reports, intervention note, IEP/504/individual health plan, physician order, copy of practitioner’s license, etc.; NC Division of Health Benefits, 2018). In these states, LEA Medicaid program administrators are well-served when student records, including treatment notes, are

routinely archived. Scheduled internal or self-audits also assist in preparation for a potential Medicaid review. Medicaid agencies may recoup funds if discrepancies and/or errors are found during review, and, in some cases, extrapolation to all claims for a given time period may occur if error rates exceed acceptable standards.

2.5. Summary

To conclude, this chapter sketches one line of methodological roots in occupational science to articulate opportunities for a more muscular commitment to dissemination and application of the discipline's scholarship. A review of literature specific to the emergence of implementation science is also provided to establish the similarities between the disciplines and to make a case for their pooling of methodological and theoretical tools. Further, a history of school-based Medicaid programming is provided to establish the platform on which a demonstration of integrating occupational science and implementation science was attempted in the research described in subsequent chapters.

CHAPTER 3: METHODS

3.1. Overview

This study replicated the prescribed multi-method qualitative design for developing practice profiles put forth by the National Implementation Science Network (NIRN; Metz, 2016). Given schools are pragmatic organizational contexts wherein effective programs and practices are identified directly in relation to student outcomes (Holahan, Burton, Laverdure, &, Muhlenhaupt, 2013), the selection of modes of inquiry designed to elucidate the complexity of both “effective” and “practice” were most suitable for this study. The practice profile methodology provided an entry point for investigating the many voices and dynamic interplay between stakeholders in public education, public insurance systems, families, schools, and communities. And, it is just this intricate, ever-changing type of situation to which the transactional perspective beckons inquiry, because the details of occupations are multi-faceted, far-reaching, and difficult to anticipate (Bailliard, Aldrich, & Dickie, 2013). In this view, the practices, or occupations, germane to school-based Medicaid programs called for multiple data collection approaches, responsive and agile data analysis, and the sustained, attentive study of the situation which these methods encompass. As such, per the practice profile development design, this investigation combined semi-structured interviews; a literature, policy, and document review; a consensus vetting process; and, usability testing (Fig. 3.1) to illuminate the requirements and discrete features of the organizational occupations which comprise effective

school-based Medicaid programs. Each method is described in detail below. Further, using multiple methods also affords opportunities for expansion of the investigation (Green, Caraceli,

& Graham, 1989) and

initiation of a research

trajectory (i.e., planning

for subsequent

studies/longer-term

research agenda, based

on findings; Hesse-Biber

& Leavy, 2011) which is

commensurate with this

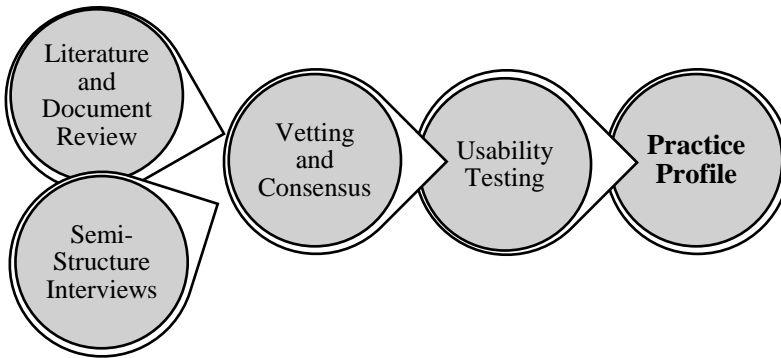


Figure 3.1. Practice Profile Development Sequence (Metz, 2016)

study being a dissertation project and potential launch of a broader research and implementation program.

3.2. Positionality of Researcher/Considerations of Power

Given my role as a state consultant in the area studied, the potential for perceived coercion and/or exploitation of my role to gain access to participants, retain them, and shape their behavior, perspective, and responses was higher than if I did not hold this position. To prevent this possible dynamic, I acknowledged the potential of undue influence directly in preliminary conversations with participants, addressed power relations in analytic notes, and tried to allay the likelihood of an evaluative experience by participants in those parts of the project that seemed most vulnerable (e.g., usability testing). I was also clear about the limits of participation in terms of duration of data collection, behavior during interviews and meetings, and what relationships with participants would entail once the study was complete.

3.3. Recruitment

The study was conducted in partnership with representatives from public schools, public and private service agencies, and community stakeholders in North Carolina, which is the my home state. Recruitment for all roles within the study (interviewees, vetting experts, reviewers, and usability testers) took place at each study phase via listserv announcements, announcements at relevant meetings, word-of-mouth across school-based Medicaid communities of practice, and direct email, phone, and in-person invitations to participate. Recruitment was ongoing until the desired numbers of participants were enrolled for each phase. Signed consent forms were obtained via the process approved by the UNC Internal Review Board for participants in all phases of the project.

3.3.1. Inclusion Criteria. Representatives from the stakeholder groups in Table 3.1 below were solicited to participate in each phase of the study: the interview, vetting, and review phases. The number of enrolled participants and participation phase are also shown.

Table 3.1: Participant Type and Count by Study Phase

Participant Type	Study Phase	Number Enrolled
Parent of Medicaid beneficiary	Vetting	1
Parent/Family advocacy agency representative	Interview	1
	Vetting	1
State department of education or other state department official with assigned work duties related to school-based Medicaid programs and/or implementation science	Interview	1
	Vetting	1
	Review	2
Local education agency administrators representing any of the following units: Finance; Exceptional Children; Student Services	Interview	7
	Vetting	2
School-based practitioners representing any of the following	Interview	8
	Vetting	2

Participant Type	Study Phase	Number Enrolled
disciplines: occupational therapy; physical therapy; speech-language pathology; nursing; school psychology		
School-based Medicaid claiming vendors	Vetting	6
National association representative with expertise in school-based Medicaid programs and/or implementation science	Review	3

In addition to these categories, purposive sampling was used to ensure stakeholders represented, to the extent practicable: rural and urban communities; each of the eight state education regions; and diversity in school-based experience, ethnicity, and gender.

Inclusion criteria for usability testing school districts included having active Medicaid Administrative Claiming and fee-for-service programs. Diversity in district size, location, and rate of student Medicaid enrollment guided invitations, with the final collection of six districts having the following demographics:

Table 3.2: Usability Testing Local Education Agency (LEA) Profiles

LEA	District Size (no. students)	NC Education Region	Percentage of Students with Disabilities	Total Enrolled in Medicaid, age 0-18
A	14662 students	Southwest	15.7	12703
B	3694 students	Western	14.7	3575
C	54530 students	Piedmont Triad	13.4	38782
D	26213 students	Southeast	12.6	16141
E	24033 students	Western	14.8	21788
F	8064 students	Western	16.8	7816

3.3.2. Exclusion Criteria. Stakeholders who did not have direct involvement with school-based Medicaid programs at least monthly were excluded from the study, given they were unlikely to possess adequate or current knowledge to inform the practice profile development. School districts that did not have active Medicaid Administrative Claiming and fee-for-service programs were similarly excluded. Charter schools were not included in the study because they are not currently considered eligible providers under the state's Medicaid LEA policy.

3.3.3. Retention. While sustained stakeholder participation was not an issue in this study, given episodes of participation were brief, retention was encouraged through recognition of professional service/contribution to development of the practice profile if the stakeholder chose to be listed in the acknowledgments of the final product. Some stakeholders also had the option of using participation hours for licensure renewal and as an exemplar for performance evaluation (certificates of participation with hours of contribution were provided for all participants). Interviews were scheduled at times convenient for interviewees and reminders of upcoming interviews, vetting meetings, and due dates for feedback were provided via email during each phase of the study.

3.3.4. Confidentiality. Throughout the study, no data was associated with participants in any identifying way unless participants selected the option to be credited as contributor to the practice profile and/or participate in authorship of subsequent manuscript(s).

3.4. Study Participants

3.4.1. Phase I: Semi-Structured Interviews. Recorded phone interviews were conducted with 17 stakeholders representing two state departments, 14 school districts, and one family advocacy agency. Interviewees held positions as consultants, occupational therapists, speech-language pathologists, nurses, directors of school district Exceptional Children programs, school district Finance department staff, and attorneys.

3.4.2. Phase II: Vetting and Consensus-building. The initial six-hour in-person vetting session was held with seven stakeholders representing one state department, two universities, two school districts, one Medicaid claiming vendor, and one family advocacy agency. Roles held within the represented agencies included a district Exceptional Children program director, two district related services coordinators, two special education consultants, two university faculty, a foster parent of children who were Medicaid-enrolled, and an attorney. Several vetting group members served in more than one role, which is why the role-type count exceeds the number of participants.

The second round of vetting included these same seven individuals and nine additional stakeholders representing two national associations, two state departments, and two Medicaid claiming vendors. The second wave of vetting experts held roles as implementation specialists, Medicaid specialists, consultants, policy analysts, and executive directors.

3.4.3. Phase III: Usability Testing School Districts. The six pilot school districts that volunteered to field test the school-based Medicaid practice profile are described in Table 3.2.

3.5. Data Collection and Analysis

3.5.1. Phase I: Semi-Structured Interviews. Because the stakeholders in this project represented a variety of social positions and disciplines, a multi-source feedback model was employed (Berk, 2009). See Figure 3.2. This form of inquiry assumes bias is inherent if only one person's or group's perspective is taken into account. The model also suggests there is no one perfect or reliable data source, and that by combining input, the strengths of each source can

compensate for the weaknesses of another (Appling, Naumann, & Berk, 2001). This was

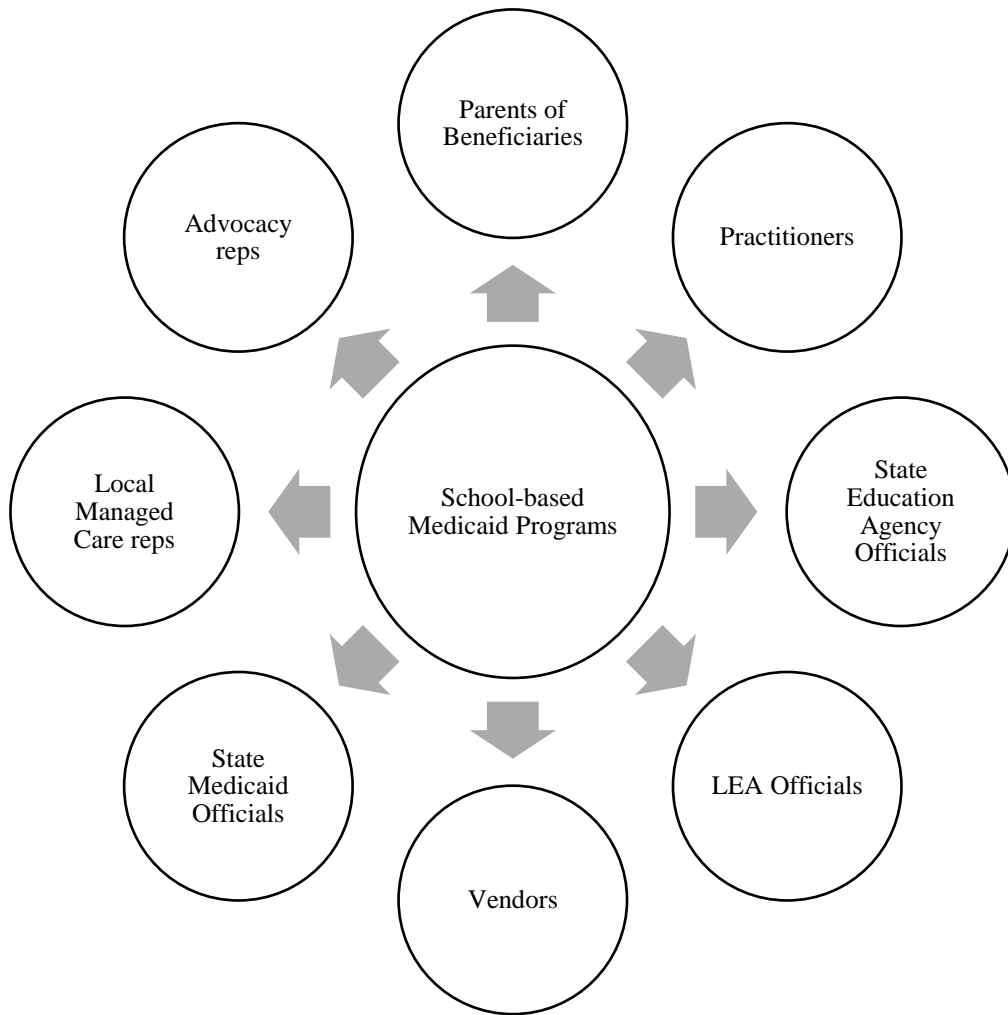


Figure 3.2. Multi-source Stakeholder Feedback Model

especially salient in this research, where not only will there be a variety of potential users of the School-based Medicaid Practice Profile, but also a variety of potential applications (e.g., program evaluation, program and systems development, and staff and stakeholder education). It was also assumed stakeholders meeting inclusion criteria possessed important knowledge about what makes for a successful school-based Medicaid program—which cannot be fully apprehended through observation and/or audit—and semi-structured interviews are an accepted method for illuminating these unique experiences and perspectives (Hess-Biber & Leavy, 2011).

Each phone interview was digitally recorded and I took notes during the conversation. Participants responded to the following questions, which were derived from the NIRN (Metz, 2016) interview protocol:

- What values you think are important for school-based Medicaid programs to uphold?
- What practices are essential to successful school-based Medicaid programs?
- What supports school-based Medicaid program success?
- What challenges school-based Medicaid program success?
- What are signs that school-based Medicaid programs are not functioning well?

Interviews lasted from 18-42 minutes. Immediately after each interview, I read the interview notes, documented any reflections on the interview process, described affective responses to the conversation—particularly if surprising or unexpected elements emerged—and highlighted any concepts or features of the conversation that were prominent, illuminating, and/or uniquely meaningful. Within a week following each interview, the recording was transcribed. The text was then engaged as openly as possible, without conscious, pre-figured categories into which concepts were sorted; rather, in this immersion phase, the interviewees' responses were read and re-read in search of chunks of meaning (Marshall & Rossman, 2014). ("As openly as possible" is used with the disclaimer that a literature and document review of school-based Medicaid programs was conducted prior to the interview phase and I am a school-based Medicaid and implementation consultant. No doubt, literature- and experience-generated categories—and biases—were brought to bear on what was deemed worthy of attention in the quest for "chunks of meaning." Further, awareness that the data would be organized into the eventual structure of a practice profile, which counts as meaningful descriptors deemed

“teachable, learnable, and doable” [Fixen, Blasé, Metz, & Van Dyke, 2013] impacted the identification of these first codes.) Codes regarding properties and characteristics of a school-based Medicaid program that emerged from an interview were recorded at the end of each transcript under the heading of “Potential Practice Profile Categories.” Code assignment was determined by the amount of time/text a concept or characteristic was given, recollection of the speaker’s energy/tono/attitude/affect as the characteristic or situation was described, alignment with previous transcripts and the literature, and my intuition. Inevitably, as codes and potential themes were described, my sensitivity to the recurrence of a given characteristic or feature in subsequent interviews was heightened, such that the building of categories was iterative and informed by the density of linkages that grew (or did not) over the course of the 17 interviews/transcriptions/analyses (Schatzmann & Strauss, 1973). For example, early linkages were noted in how particular Medicaid program features were emphasized based on the role of the interviewee: therapists used more words and interview time describing documentation and the affective experience of participating a Medicaid program, whereas district administrators allocated more time and commentary to program integrity and efficiency. Awareness of this seeming role-based clustering heightening attention to subsequent supporting—or starkly contradictory—evidence.

Following this initial analysis, the transcript was sent to the interviewee via email for validation; interviewees were given full editing rights to change, redact, and/or add to the transcript if additional thoughts and perspectives had emerged since the original interview. Interviewees were also asked to review the list of “Potential Practice Profile Categories” and respond to the accuracy, thoroughness, and resonance of the identified potential program features. Three of 17 interviewees sent back minor revisions which were incorporated; the rest of

the transcripts were accepted as presented and no adjustments to the potential categories were requested.

Once all the transcripts were finalized, each transcript was re-read and original coding was refined to identify patterns and linkages, to modify existing codes, and to add new codes to the composite potential categories list. The 17 potential category lists were then combined with themes from the literature/document review and cumulatively analyzed for redundancy, alignment, priority, scale, and granularity. From this stage in the analysis, six broad categories with sub-elements were identified as follows:

- Philosophical principles (five sub-elements)
- Service documentation (nine sub-elements)
- Infrastructure (12 sub-elements)
- Teaming and communication (14 sub-elements)
- Morale (8 sub-elements)
- Compliance and Accountability (10 sub-elements)
- Fiscal Management (eight sub-elements)

These data were then sorted using a template to produce the initial shell of the school-based Medicaid program practice profile.

3.5.2. Phase II: Literature, Policy, and Document Review. A focused literature and document review was conducted to identify potential program core elements and critical components for school-based Medicaid programs. Sources in addition to journals and textbooks included: federal legislation, policy, letters, guidance, and memos; standards of practice and professional guidelines; state and national professional association standards and resources; private foundation, healthcare consumer advocacy, and business standards and resources; state

and local job descriptions and performance appraisal instruments, monitoring/audit rubrics of school-based Medicaid programs; and state and local handbooks/guidelines/manuals. Citations for resources used in the document review are listed in the section following the full list of references for the project. Data derived from the broad scoping review were triangulated and combined with stakeholder interview data to draft the initial practice profile which contained five core elements (broad categories) and 30 critical components (more specific program features under each core element. Implementation activities (measurable/observable examples of the program functioning at *expected*, *developmental variation*, and *needs improvement* levels) were not included in the original draft to reduce cognitive load for the vetting team and to ensure the core elements and critical components were stable before installing the exemplar activities.

3.5.3. Phase III: Vetting. After the initial draft of the school-based Medicaid practice profile was complete, a five-hour, in-person vetting session was held with seven participants. None of the participants requested a virtual participation option. I facilitated the session and followed the NIRN practice profile vetting protocol (Metz, 2016) with one modification. During the broad reflection phase (morning portion of the meeting), a tuning protocol (McDonald & Allen, 2017) was used in place of NIRN reflection items. For each core element and its critical components, participants commented on clarity, what they liked, and what they wondered could be improved; I stayed silent during this step and took notes on the group's comments which they could see via a projected computer screen. Following participant comments on each section, I reflected on the feedback and facilitated a modified consensus process to make edits to the core elements and critical components. Substituting the tuning protocol for the NIRN reflection activity did not change the basic question set or reflection phase outcomes. Additionally, the tuning protocol had the following advantages of:

- focusing on document content and design considering project goals
- being designed specifically for adult peer review in educational settings
- providing an efficient structure for project overview, clarification, study/feedback preparation, feedback, and researcher reflection on feedback (McDonald & Allen, 2017)

In the second, function-specific stage of vetting (afternoon portion of the meeting), the NIRN protocol was used to select and refine the guiding philosophical principles for the school-based Medicaid programs, eliminate redundancies in practice profile critical components, sequence the core elements in priority order, generate the set of implementation activities at the *expected* level for 12 of the 30 critical components, and identify additional resources/literature needed. The session ended with the group agreeing:

- I would:
 - complete the remaining implementation activities for all critical components
 - seek additional literature/resources and incorporate findings
 - draft the introduction and purpose section
 - send the complete second draft (2.0) back to the vetting group for review within one week of the in-person meeting
- The vetting team would:
 - review and comment on version 2.0 within one week of receiving it
 - not comment if he/she could support version 2.0 as written

The terms of the agreement were upheld and vetting team member comments/edits were incorporated. In addition to the original seven vetting team members, version 2.0 of the practice profile was also made available for review by nine additional stakeholders to incorporate a more national perspective and the expertise of an implementation science specialist. Altogether,

comments and edits from 16 reviewers were synthesized to build the third draft of School-based Medicaid Practice Profile (SBMPP 3.0). In preparation for usability testing, the tool was then translated to a fillable PDF format to facilitate ease of use in the field.

3.5.4. Phase IV: Usability Testing. Usability testing is the rapid, real-life, sequential field assessment by specific users of a tool or product under development to discern its overall relevance, friendliness, utility, efficiency, and merit; the goal is to make improvements to both the product and the process in which it was designed (Dumas & Redish, 1999). While this was the final phase in the initial creation of a practice profile, the assumption is ongoing improvements and adaptations will be made by users once the profile is published (Metz, Bartely, Fixsen, & Blasé, 2011.) Indeed, given the unique set of practices required for compliant, effective, and efficient school-based Medicaid programs often change as local, state and federal policies are updated, research findings emerge, and practice-based evidence accumulates (Brandenburger-Shasby, 2005; Hollenbeck, 2010; Royeen & Furbush, 1996; Swinth, Chandler, Hanft, Jackson, & Shepherd, 2003), ongoing revisions to the tool are anticipated. As such, practice profile usability testing is considered formative, in that the aim is to identify and repair immediate problems through a sequence of test-adjust interactions with pilot sites (Barnum, 2010).

Six North Carolina school districts agreed to field test the School-based Medicaid Practice Profile 3.0 through completing a Medicaid program assessment within 30 days of agreement to serve as a pilot. Usability testing LEAs provided feedback on the practice profile's strengths, needs, and overall usability via an online response platform (Qualtrics) which included the following items:

1. The School-based Medicaid Practice Profile does what it is supposed to do for district teams.
2. The School-based Medicaid Practice Profile design matches its purpose.
3. Our team was able to do what it wanted to do with the School-based Medicaid Practice Profile.
4. When using the School-based Medicaid Practice Profile, did your team become confused at any point?
 - 4a. If yes, at what point did your team become confused? (Please cite applicable Core Element and/or Critical Component numbers.)
5. When using the Practice Profile, did your team get distracted or encounter challenges/barriers?
 - 5a. If yes, describe the challenges/barriers you encountered. (Please cite applicable Core Element and/or Critical Component numbers.)
6. Our team will use the School-based Medicaid Practice Profile for annual program assessment going forward.
7. Our team recommends other school districts and charter schools use the School-based Medicaid Practice Profile for program assessment and improvement planning.
8. How would your team describe the School-based Medicaid Practice Profile in its own words?
9. Is there anything else you would like to say about the School-based Medicaid Practice Profile?

Results of these local program assessments via the practice profile (i.e., scores on critical components, core elements, and total scores) were not collected as part of the project data set to

promote focus on the experience of using the tool, rather than on the relative health of the district's Medicaid program. Further, not collecting the districts' scoring data mitigated some bias in responses to the feedback by reducing the incentive to get a favorable score and/or blame the tool itself for yielding unfavorable scores. The testing LEAs also received a template for creating an improvement plan based on profile findings, should they choose to continue Medicaid program quality implementation; the improvement plan data was also not a required submission for this study. Data from usability testing informed final revisions to the practice profile before its release for statewide use.

CHAPTER 4: RESULTS

4.1. Outcome of Phase I: Interviews and Literature/Document Review

Based on the data collection and analysis described in Chapter 3, the interview and literature/document review yielded seven broad program categories with sub-elements as shown in Table 4.1. Bulleted items in each category are presented in order of their frequency/saturation in the interview data.

Table 4.1: Initial Thematic Analysis Categories from Interview and Literature Review Data

Philosophical principles <ul style="list-style-type: none">• Student-centered practice• Integrity• Evidence-based practice• Stewardship• Continuous program improvement
Practitioner documentation <ul style="list-style-type: none">• Individualized• Clinical reasoning/vocabulary for multiple-audience leverage• Timeliness• Progress monitoring/data-driven services• Licensure• Audit-ready archiving• Blindness to Medicaid enrollment• Considered in workload analysis• No duplicated effort
Infrastructure <ul style="list-style-type: none">• User-friendly computerized/web-based platform with auto-text, upload feature, business rules, reminders, and progress monitoring; entered data used for multiple purposes; reporting with graphic displays• Data analysis practices• Internet access• Access to input device(s)• Access to evaluation and treatment materials

- Part of job descriptions
- Orientation and ongoing training on standard protocols
- Access to TA (DPI, vendor)
- Clarity re: medical necessity and educational relevance; impairment and participation
- Reasonable DMA policies and rates
- Fluid processes for obtaining MD orders and parent consent
- Medicaid point person housed in EC Dept.

Teaming and communication

- Consistent expectations and habits for all practitioners
- Stakeholder education and partnership (e.g., training re: parent consent; education for NC Division of Health Benefits and NC General Assembly)
- School/community provider care coordination
- Feedback cycles
- Vertical and horizontal communication cycles
- Confidentiality
- Transparency
- Messaging/positioning of Medicaid program
- Claim and reimbursement reports (how much, how allocated)
- Vendor relationships
- Relationships with LEA IT, HR, and Finance Departments
- Relationships with General Education leadership (re: Random Moment Time Study)
- Relationship with the State Education Agency

Morale

- Supportive leadership and culture
- Working conditions (pay, materials/supplies/space, incentives, duties)
- Confidence and competence
- Resolution of tension that Medicaid detracts from educational mission; “necessary evil”
- Demonstration of benefit to students and programs
- Fear management
- Celebration
- Recruitment/retention/staffing/salaries

Compliance and accountability

- Educational decision-making (service delivery model, location, freq/duration)
- Peer review
- Service verification
- Medicaid policy habits
- Clarity of expectations
- All required documents (evaluation, plan of care, date of service note, progress report, physician order, parent consent)

- Monitoring (timeliness, utilization, potential vs. actual, employment data for MAC pool)
- Workload
- Internal audit/Program improvement cycles
- Recoupment

Fiscal management

- Staffing
- Utilization
- Start-up costs/return on investment
- Federal or state/local funding of salaries
- Reimbursement cycles
- Use of reimbursements
- 20% Medicaid reimbursements held for possibility of recoupment
- Reimbursement Rates

4.1.1. Philosophical Principles. As I assembled the first draft of the profile, I separated the philosophical principles from the other six themes, given they reflect the responses to the first interview question, which was intended to elicit and identify what stakeholders cared about and valued, rather than actual the practices thought to be essential to a school Medicaid program. That said, it was not uncommon for stakeholders to start out discussing principles and values and then drift into describing practices that embodied a given principle. When that occurred, I flagged it in my notes and later moved the comment under the question to which it was more closely aligned (e.g., “What practices are essential to successful school-based Medicaid programs?”).

Student-centered practice was identified across stakeholders with high frequency and was often the first thing an interviewee identified as critical to Medicaid programs in schools. An authentic focus on student outcomes and individualized, holistic, educationally relevant services, regardless of a student’s Medicaid status, were frequently mentioned in contrast to and as protective factors against unseemly “dollar chasing” and “administrative convenience.” Closely

linked to student-centeredness—and an implicit fear of/disdain for potential mishandling the mission of public education—was repeated interviewee emphasis on program and practitioner *integrity*. Here, the concern centered on the Medicaid program running with high standards of honesty, accuracy, reliability, and careful adherence to legal and ethical mandates. As one interviewee said, “Everybody can’t do their own thing, by themselves, and have a sound school-based Medicaid program.”

With integrity, *stewardship* of public funds through efficient and responsible operations in general was a clear theme. Stewardship was also central to the value of returning reimbursements directly to special education programs, rather than to the larger general education fund. Another feature of program integrity that emerged as a separate consideration due to frequency and strong associations with other principles was *evidence-based practice*, which stakeholders associated with service effectiveness and overall system capacity to make evidence-based resources and training available to practitioners. Through one or more of these first four principles, interviewees often arrived at/concluded with considerations of Medicaid program *continuous quality improvement* as a non-negotiable philosophical principle undergirding sustainable practice. Together, the five philosophical principles described here were included in the introduction section of all drafts and the final version of the tool.

Stakeholders also identified a handful of related non-principles that were less obvious/more implicit than the positive principles. While they do not appear in the Table 4.1, given the practice profile protocol is meant to articulate the foundational values the program is *for* rather than *against*, it is worth noting these principles and values here; I will address their implications in Chapter 5. As already noted, there was a strong undertone of ethical resistance to school Medicaid programs prioritizing finances, district or program convenience, and, Medicaid

policies and standards (over educational policies and standards). Interviewees also communicated, both in what they said and how they said it, specific negative affective responses to school Medicaid programs and features. Fear and anxiety over making mistakes was prevalent; as one stakeholder put it, “I just want to do everything right. I don’t want get anybody in trouble.” Associated with anxiety was a theme of risk avoidance, mitigation, and management which was marked in comments related to fraud, paybacks, sanctions, and licensure infractions. The other main category of negative feelings about school-based Medicaid programs, especially among the practitioners who were interviewed, was disdain and frustration. The experience of the Medicaid program causing “extra work” led one stakeholder to call duties related to Medicaid claiming “our cross to bear.” A sense of not having enough information to comply with Medicaid rules or know if their Medicaid program efforts were having an impact also contributed to practitioner frustration and a sense of being under-valued. As one interviewee said, “I stopped asking questions. I just do what I’m told and hope they get it right.” Several practitioners shared some version of one person’s reflection on “how nice it would be if they told us how much reimbursement we were generating.” Finally, frustration with the lack of clarity and limited resources/training for negotiating the perceived tension between educational relevance (desirable) and medical necessity (undesirable) was pronounced among interviewed practitioners. Similar exasperation was shared across stakeholders in comments related to more global dissatisfaction with inadequate funding for special education and the need to seek Medicaid reimbursement in the first place.

4.1.2. Core Elements 1, 3, 4 and 5. I began transferring the remaining six themes into a practice profile template (see example in Figure 2.1), designating the theme headings as core elements and the bulleted items as critical components. Core elements 1, 3, 4, and 5 were derived

directly from the thematic analysis and remained stable throughout all phases of the project, save for minor adjustments to names and the overall order of presentation. They are described here in order of their respective saturation in the interview and literature review data sets, per Table 4.1. *Practitioner Documentation*, earned stand-alone core element status by virtue of its strong presence across both interview and literature/document review data. This core element details quality and logistics standards for completing evaluation/re-evaluation reports, treatment notes, and progress reports by all provider types. As I will discuss in Chapter 5, practitioner documentation joins the infrastructure core element in operationalizing most of the philosophical principles. *Teaming and Communication* captures how a school district installs and supports internal communication across departments and teams. Three additional critical components outline external partnerships with families, other agencies (e.g., state agencies and professional associations), and community providers to ensure stakeholders inform and are informed about the local school-based Medicaid program. *Fiscal Management* addresses how LEAs allocate and monitor resources to ensure services to students are compliant, maximized, and efficient. This core element also sets program standards for how Medicaid reimbursements get distributed after services are rendered/claims are paid. Finally, *Compliance and Accountability* captures how districts pursue compliance with federal and state Medicaid and education policies (which are not always aligned) through: monitoring efforts like fidelity checks, peer review, and internal audits; compliance training for staff; and public reporting.

4.1.3. Core Element 2, Infrastructure. As I transferred the components housed under the original Morale theme into the template, I recognized they were essentially descriptions of leadership practices found in the implementation science framework known as implementation drivers. Drivers represent what is required to install and support consistent use of an innovation

and include leadership, organization, and competency drivers (Fixsen, et al., 2005). In addition, I was aware of and ruminating over how the *Infrastructure* category was not as tightly aligned as the other elements already constructed. I went back to the Infrastructure section and saw that the other two known implementation drivers—organization and competency drivers—applied and would better organize/align those Infrastructure components. As such and encouraged by sustainability researchers, Chambers, Glasgow, and Stange (2013), who argue for local adaptation of protocol as a way to improve programs and outcomes, I introduced a variation in the standard practice profile organization. By sorting the large Infrastructure core element into the three implementation driver sub-sections, I was able to incorporate the morale items in the leadership driver section and confer much stronger internal coherence within the element. This late-phase analysis illustrates well how thoroughly iterative practice profile development is, and, as I will discuss later, why this methodology fits inquiry from the perspective of occupation as occurring in the ongoing flow of action.

The Infrastructure sub-elements, then, begin with *Competency* components which outline how personnel involved in a school-based Medicaid program are supported and held accountable for their performance. For the interviewed stakeholders in this study, school staff learning what skills and attitudes are expected related to the Medicaid program, and understanding how/by what metrics practice is monitored, was a priority. And, as confirmed in the literature (Fixsen, et al., 2005), when staff capacity to carry out an innovation or program is described, the natural next step is to consider what system supports must be in place for personnel to perform optimally. *Organization* drivers capture these features: for school Medicaid programs, basic supports like a physical space and equipment to complete documentation, an internet connection, documentation software, and streamlined processes (e.g., for accessing required consents or

generating reports for a variety of audiences) were identified. Finally, the *Leadership* drivers, which encompass district and program administrator practices required for both staff and systems supports to function as intended, were identified. In this study, elements related to Medicaid advocacy, creation of a positive Medicaid program culture, and dedication of central office personnel to leading the Medicaid program emerged as critical leadership features.

Performance strata descriptions for each critical component were not included in the original draft of the practice profile that was sent to the Phase II stakeholder team in preparation for the vetting phase.

4.2. Outcome of Phase II: Vetting

As described in the analysis section in Chapter 3, the vetting phase resulted in second and third versions of the practice profile. Real-time wording/phrasing edits were made to the first draft during the in-person meeting. In addition, philosophical principles and core elements were re-ordered to reflect the team's consensus program priorities (versus prevalence/saturation in project data) and the group made suggestions for development of the introduction. Also, during the in-person meeting of the vetting phase, the vetting team identified implementation activities at the *expected* level for the first 12 critical components under the Infrastructure core element, and at the full *expected*, *developmental variation*, and *needs improvement* levels for the first five components. Given this model for specificity, scale, and granularity of activity descriptions created by vetting team members, I completed all remaining performance strata and the introduction in the week following the in-person vetting meeting. This revised version of the profile (2.0) was then sent to 16 vetting stakeholders (seven original and nine additional) for comment. Edits based on comments from 15 of 16 second-round vetting experts were incorporated to create the draft (3.0) which was given to six LEAs for usability testing. One second-round vetting expert did not have additional edits/comments.

4.3. Outcome of Phase III: Usability Testing

Results from usability testing feedback are provided in Appendix A. Four of six LEAs provided feedback through the online response platform. Hurricane Florence moved through North Carolina in the middle of the 30-day usability testing period and two districts were unable to continue participation in the study due to storm damage. From feedback that was provided, individual practice profile components/wording were adjusted, but no major additions, deletions, or re-organization of content were necessary to address the field testers' concerns. Further, confirmation that the tool provides an aspirational profile of school Medicaid programs was inferred from one LEA stating, "Our team did not know we needed to implement items 1.1, 1.7, 1.11, 2.3, 4.1, or 5.2."

Following usability testing and revisions guided by pilot LEA feedback, the final version of the practice profile (see Appendix C) contained the following features:

- Introduction and purpose
- Suggestions for team members to include when conducting local Medicaid program self-assessment using the tool
- Description of philosophical principles undergirding school-based Medicaid programs
- Description of practice profile structure
- Practice profile core elements and critical components

CHAPTER 5: DISCUSSION AND CONCLUSION

5.1. Summary of Findings

In this project I employed an implementation science method for gathering, analyzing, and organizing data known as a practice profile to investigate a community-level occupation specific to organizations (which I have called an *organizational occupation*), using school-based Medicaid programs as the test case. My aim in so doing was to demonstrate that as complex, dynamic, situational, and ongoing as community-level occupations are when viewed from the transactional perspective (Kantartzis & Molineux, 2014), occupational scientists may be helped by—and find success with—methodological approaches borrowed from compatible disciplines. I also anticipated that an occupational scientist’s application of methods from implementation science would not be a one-sided appropriation, but would instead result in a better-together pooling of disciplinary resources. For occupational science, the gain would be an accessible, practical entry-point for studying community, group, or organizational occupation-in-action/occupation-in-context. For implementation science, the gain would be a more refined, coherent theoretical foundation for why a methodology like practice profile development makes sense, and why the outcomes of research using this methodology can be instrumental in solving problems at the community level (Cutchin, Dickie, & Humphry, 2016). Finally, and because of my firm pragmatic stance, I needed this experiment to do something more than promote either or both sciences. Dewey would have never endorsed research solely for the sake of strengthening a discipline (Evans, 2000); inquiry comes with responsibility for what is discovered, and hopefully those consequences do something to liberate and support the flourishing of others (Boisvert,

1998). As such, making some offering, some enhancement, some contribution to the public good was critical to my investing—and sticking with—this work. As I stated in the introduction, Medicaid is one of the public projects to which I am deeply committed. Consequently, creation of a practical resource for sustaining and improving Medicaid programs in schools—another public project for which I stand—as one outcome of this work has been critical.

In this chapter, the outcomes are discussed in light of relevant literature which leads to implications for school-based Medicaid programs, occupational science, and implementation science. I will close with a critical evaluation of the project, noting its limitations and discussing opportunities for future research and collaborations between occupational scientists and implementation scientists.

5.1.1. School-based Medicaid Programs Findings and Implications. The study aim to develop a practice profile for school-based Medicaid programs was met, per Appendix B. Upon distribution, NC school districts will have an evidence-based tool for assessing the relative health of their Medicaid claiming practices and overall Medicaid program quality. The approach I used to develop the practice profile closely followed the NIRN protocol (Metz, 2016) with the exception of substituting a tuning protocol for the NIRN question set during the broad reflection activity in the vetting phase (McDonald & Allen, 2017). The tuning protocol is designed specifically for adult peer review in educational settings and, in my ongoing experience with it, creates a lively, imaginative, and safe feedback dynamic among stakeholders and project developers.

Similarly, the final version of the School-based Medicaid Practice Profile (SBMPP) matches the NIRN structure for a practice profile with one key innovation. Because leadership practices related to staff morale and program culture, organizational resources, and staff

competency emerged as a strong themes in the interview data, creation of a core element focused on program infrastructure using implementation drivers (i.e., leadership, organization, and competency drivers; Cook & Odom, 2013) was fitting. This additional layer of sorting critical components within a given core element has both structural and theoretical implications for how practice profiles are developed. I will explore those implications in the implementation science section below.

5.1.1.1. Findings and Implications of SBMPP Philosophical Principles. In terms of the content of the SBMPP, several findings were of interest and/or surprising in light of what is already known about school-based Medicaid programs, starting with the philosophical principles that emerged. First, the five principles—student-centered practice, integrity, stewardship, evidence-based practice, and continuous program improvement—were notably *not* specific to Medicaid claiming. In other words, these principles could have easily been responses to the prompt, “What values do you think are important for schools or special education programs to uphold?” Stakeholders articulated values about the broader mission of public education, almost as if the Medicaid program was not worth reflecting on in light of higher values associated with educating students with disabilities. Even the theme of stewardship, which, in representing financial concerns, was most closely connected with Medicaid reimbursement, derived from a sense of obligation for proper handling of public funding, regardless of the allocating agency. From my interpretive lens, “education is our sole mission” is the message stakeholders wanted to forcefully communicate as they shaped the philosophical foundation of school Medicaid programs.

This analysis is supported by the negative emotional responses to the interview question about Medicaid program values and the implied counter principles described in Chapter 4. The

emotion in these responses was unexpected and palpable. Hochschild (2016) suggested feelings are key indicators of what she calls a “deep story—a metaphor-based narrative, the details of which corresponded to the emotions experienced by informants. A deep story is a *feels-as-if* story—stripped of facts and moral judgment. It tells us what participants think it’s normal to feel (everyone does) and normative to feel (everyone should)” (p. 685). My read of the emotions conveyed by the stakeholders in this study and the narratives being affirmed by those feelings include:

- resistance to forces that would supplant a singular and right focus on educating students with disabilities (i.e., Medicaid is a distractor)
- resistance to insertion of the medical model in the educational setting (i.e., Medicaid is a misfit)
- fear and anxiety (i.e., Medicaid is walking a tightrope against my will; it inserts unwanted risk in my work)
- frustration (i.e., Medicaid is an exercise in futility; information, resources, and incentives to participate in the program are lacking)
- disdain (i.e., Medicaid is thankless, extra work)

If these are the working metaphors of a deep story lived by school-based Medicaid program participants, then it follows they might side step the invitation to articulate values specific to Medicaid reimbursement and prefer, instead, to discuss the more ‘normal’ and ‘normative’ principles of public education.

The implications of these findings understood in this way are worth considering, especially for school district leaders, technical assistance/coaching providers, and pre-service educators. For LEA administrators, listening for the deep Medicaid story staff are telling and

living will be instructive in designing program orientation, ongoing training, communication, and monitoring efforts. As mentioned in Chapter 4, the connoted counter principles and related emotions did not appear in the SBMPP set of philosophical principles. However, several of the critical components in the Infrastructure and Teaming and Communication elements (Appendix C) outline program practices directly linked to the resistance narratives described above. Which is to say, Medicaid program leaders will need to hear (e.g., via working conditions and belief surveys, town hall meetings, etc.) and respond to staff stories. This could be through practices such as: ensuring Medicaid training is thorough, timely, and inclusive of staff questions/concerns; providing staff the material resources they need to comply with Medicaid program requirements; and, creating persuasive/livable alternative Medicaid narratives through recognitions, celebrations, and data sharing. Further, coaches and technical assistance providers will need to understand these narratives to sustainably impact practitioner behaviors as policies and technology change. When new requirements or tools for program compliance are presented (e.g., an online documentation platform), practitioners make value judgments about the extent to which rules or tools are aligned with their stories and goals; the more valuable they deem the presented change to be, the more likely they are to use it (Ertmer & Ottenbreit-Leftwich, 2010). In terms of the implications for school-based practitioner pre-service training programs, clear articulation of how Medicaid funding is an important and effective funding source for schools needs to be part of pediatric and practice setting coursework. In addition, pre-service programs must present the administrative aspects of practice (e.g., documentation, scheduling, coordinating care, etc.) as inseparable from and decidedly not ancillary to direct interaction with clients.

5.1.1.2. Findings and Implications of SBMPP Core Elements. The five SBMPP core elements—Infrastructure, Teaming and Communication, Practitioner Documentation, Fiscal Management, and Accountability and Monitoring—derived in this research represent my initial effort to establish a ground-map (Dewey’s label for a contingent, working theory that enables inquiry, Cutchin, 2008) for a functionally-coordinated school-based Medicaid program. The core elements prioritize connected arrays of occupations carried out across Medicaid stakeholders, and the critical components and implementation activities precisely describe those occupations in terms that are “teachable, learnable, and doable” (Metz, 2016, p. 1).

5.1.1.2.1. Infrastructure. The *Infrastructure Competency Driver* sub-element outlines how personnel involved in a school-based Medicaid program are supported and held accountable for their performance. The implementation activities set standards for: a) using consistent Medicaid program language across local documents (e.g., job descriptions, performance evaluations), and b) orientation, training, and technical assistance occupations. The *Organization Driver* activities describe the procedural, environmental, and material resources that scaffold effective and efficient claiming practices (e.g., internet access, protocols for obtaining parent consent, leveraging documentation data for multiple audiences). *Leadership Driver* occupations underscore advocacy for the Medicaid program on behalf of students, family, and staff, starting with a dedicated central office Medicaid program administrator position. Also, as noted in the discussion of philosophical principles, leadership promotion of a positive Medicaid culture through routines of celebration and communication were determined essential practices.

Two avenues of implication for the *Core Element 1: Implementation* are worth tracing here: one for Medicaid program leaders and one for practitioners. For program leaders, active implementation of the program must be authentic, visible, and closely paired with larger system

priorities such as educating students and fostering professional growth for staff. Practitioners will respond poorly to a Medicaid program that communicates, “Medicaid claiming brings money into our district. Medicaid tasks are included in your job description. Do it.” The temptation of a more autocratic leadership approach in school-based Medicaid programs is somewhat understandable. LEA administrators often lack working knowledge of Medicaid policy, practitioner licensure requirements, and practice standards for documentation; as such, most districts contract with reimbursement vendors for claim preparation. With an expert vendor handling the details, administrators can operate a step removed from the day-to-day realities of the Medicaid program and focus on the bottom line, which practitioners often perceive is calculated in dollars rather than student achievement. Given these dynamics, Medicaid program leaders will need to work alongside staff to create a supportive Medicaid program infrastructure, rather than simply mandating and monitoring participation.

On the practitioner side, the significance of these findings lies in the potential for imagining and engaging alternative narratives about school-based Medicaid programs. Given efforts to build a supportive infrastructure, the notion that school-based Medicaid claiming has merit and may actually promote educational outcomes can at least be entertained. While deep stories are defined by selective eschewal of fact (Hochschild, 2016), a Medicaid program infrastructure that demonstrates care for practitioners may communicate leadership capacity to also care for students, rather than revenue. In turn, this could open doors for conversations about the data presented in Chapter 2 related to the known educational benefits of school-based Medicaid programs (e.g., Medicaid-enrolled children experience enhanced academic achievement and greater future earnings, [Brown, Kowalski, & Lurie, 2015]; children covered by Medicaid during their childhood are more likely to graduate from high school and college, have

higher wages, and pay more in taxes as adults, [Wherry, Miller, Kaestner, & Meyer, 2015]). In short, when implemented, the infrastructure components in the SBMPP may create a space for practitioners to reflect on and potentially refigure beliefs and feelings about school Medicaid programs.

5.1.1.2.2. Teaming and Communication. Core Element 2 details the occupations comprising internal LEA communications and external partnerships with families, other agencies, and community providers. Internal activities include: a) adding the Medicaid program as a standing agenda item for district leadership, board of education, and relevant department staff meetings; b) active information sharing with internal stakeholders (e.g., via message board in the documentation software); and, c) routines for sharing Medicaid program performance. External actions demonstrate partnership with families (e.g., parents surveys include Medicaid items), community agencies (e.g., advocacy groups, faith-based organizations, and/or relevant support groups are engaged for stakeholder empowerment efforts which include Medicaid content), and community-based service providers (e.g., community providers are invited to school team meetings for students they serve).

The findings in the Teaming and Communication core element suggest intentional publicity and partnerships are critical to the health of an LEA Medicaid program. Historically, school Medicaid claiming has been conducted in a somewhat hidden and almost furtive manner (Lear, 2007), not because program leaders and participants are doing nefarious deeds, but because it is a poorly understood program operating within the otherness of special education departments. Where school Medicaid programs have dared to be more visible, their presence has leaned toward deferential, if not apologetic. This research indicates the era of below-the-radar school Medicaid programs may be ending. Stakeholders want to be not merely informed, but

partnered with as experts in efforts to create, sustain, and assess program effectiveness and efficiency. Finally, a shift toward transparency and leading by convening (Cashman, et al., 2014) is timely for school Medicaid programs. As noted in Chapter 2, CMS (2014) reversed the “free care” prohibition, such that schools may now seek reimbursement for health services named under the Medicaid state plan or EPSDT for all Medicaid-enrolled students, regardless of IDEA eligibility. This means that once states amend their Medicaid state plans to include services such as those ordered for students under Section 504 plans, individual health care plans, and behavior intervention plans, the pool of stakeholders will grow considerably. Teaming and communicating with these new partners will be critically important in ensuring growing school Medicaid programs serve students, families, and staff effectively and ethically.

5.1.1.2.3. Practitioner Documentation. While all core elements are by definition, central categories of occupations which constitute an innovation or program, *Core Element 3:*

Practitioner Documentation could well be viewed as the hub occupation around which the other core elements are organized in the SBMPP. As seen in the results chapter, this theme was the most strongly saturated in the interview and literature/documentation review data; it was positioned third among the five core elements by the vetting group based on its vision of overall Medicaid program administration scope and sequence. I will discuss this sequencing/organizing further in the implementation science implications section below.

The many facets of competently completed documentation are described in this core element. Quality standards for evaluation/re-evaluation reports, intervention plans, treatment notes, and progress reports prepared by all provider types include student-centeredness, policy compliance, efficiency, and timeliness. In addition, a condition that practitioners complete documentation without knowledge of students’ Medicaid enrollment was included to address

stakeholder concerns regarding consistency of practice across all providers and all students served. Codifying what happens with documentation post-completion (i.e., who has access to the data for what reason) was also a critical component of this element and includes expectations for user-friendly language for a variety of readers/data users.

These practitioner documentation findings are less provocative than the first two elements in terms of implications for practice and theory. It is a well-known axiom in the provision of healthcare services that “if you don’t write it down, it didn’t happen.” The implication that practitioners need to know and follow the rules for documentation based on the web of policies impacting a given practice setting is not revelatory. That said, the notion of unduplicated documentation, meaning a practitioner writes the note or report one time/in one media which is then accessed by multiple audiences through a variety of outlets has a few practical implications. One is addressed in the infrastructure core element and discussed above; namely, that a platform for securely/legally capturing and mining one-instance documentation data exists. The second implication has to do with practitioner habits, and because the consideration of habits has broader reach than school Medicaid programs, I will take up this discussion in the implementation science implications below.

5.1.1.2.4. Fiscal Management and Accountability and Monitoring. The final two core elements are discussed together given the implications for both are similar. *Core Element 4: Fiscal Management* outlines how the LEA monitors fiscal resources and ensures compliance with federal and state policies regarding Medicaid programs. Accounting practices, allocation of human and fiscal resources, and full realization of reimbursement potential are detailed in this section. In *Core Element 5: Accountability Monitoring*, occupations related to general supervision of the Medicaid program including self-monitoring and peer review, stakeholder

training and technical assistance specific to policy changes, and public reporting are included. Two local implementation ramifications of these elements bear discussion here. First, the fact that, from original thematic analysis to final version of the SBMPP, these monitoring elements remained distinct communicates a strong stakeholder interest in the ethical and legal integrity of the school Medicaid program, particularly in fiscal management. The vetting experts deliberated over combining these elements and concluded that keeping the fiscal practices distinct from all monitoring efforts was a strategic way to highlight how seriously program administrators need to embrace the philosophical principal of stewardship. Stakeholders want to ensure the Medicaid program is functioning above board and they were precise in operationally defining the above-board criteria. Second, it is interesting to note the SBMPP can be used to address its own standards. To wit, the tool can be used as a program self-assessment, with the outcomes of the review used for improvement planning and public reporting. Additionally, a practice profile self-assessment has advantages over traditional internal monitoring or self-audits, which tend to privilege compliance and outcomes, because foundational context and practices are considered during a practice-profile driven review. As such, reviewers glean information about root cause of discovered issues and can begin problem-solving for improvement far more readily than they could with compliance data alone.

5.1.1.3. Findings from Usability Testing. Before turning to the implications of this study for occupational science, the results of the usability testing phase in the SBMPP development bear discussion. Where specific edits to the tool were suggested by the usability testing districts, changes were made. One LEA said it would likely not use the SBMPP for annual program assessment going forward. No option for adding comments to this item was provided in the feedback form. As such, the reasons for this response are unknown (e.g., took too long to

administer, logistics/school calendar not supportive, lack of appropriately trained staff, findings from assessment not helpful, etc.) and the feedback was anonymous, so follow up with this respondent is not possible. Possibilities for addressing this hole in the data are addressed in the future research section below.

Also of note in the feedback was the comment: “Our team didn’t know we needed to implement items 1.1, 1.7, 1.11, 2.3, 4.1, or 5.2.” Short of mining the minutiae of each item, what is of interest—and in alignment with practice profiles serving as an aspirational picture of a given program or organizational occupation—is the respondent’s recognition of new learning and potential for program improvement. Again, opportunities for future research related to how this tool may contain unexpected or novel features of school-based Medicaid programs is discussed below.

5.1.2. Occupational Science Findings and Implications. In this section, I argue that the study aim to enhance the array of research methodologies suitable for and aligned with the transactional perspective on occupation has been met. I also discuss ancillary observations regarding what the findings may mean for occupational science. In this project, I investigated the use of an implementation science method (practice profile development) as a suitable approach for studying complex group, organization, or community level occupations. As mentioned in the introduction, I selected this method of inquiry—for what was, in part, an inquiry of methods—because my experience with practice profiles in the field has been that they are pragmatic tools which yield readily accessible and actionable packages of data describing dynamic, multi-faceted operations. As a somewhat undercover occupational scientist working in a state agency, I have viewed and understood these operations as occupations more or less consciously; this study brings that perspective into the light and articulates the merit of an occupational, and specifically

transactional, perspective on implementing organizational innovations. In truth, what I chose to study and how I chose to study it are also transactional: my inquiry derived as much from experience as from a theoretical position (Cutchin, 2008).

5.1.2.1. Practice Profiles in Occupational Science. First, to the question: Do practice profiles give occupational scientists working from a transactional perspective an effective and efficient way to investigate situations occurring within organizations as the unit of analysis (Rosenberg & Johansson, 2013)? Here, simply pointing to the practice profile in Appendix B may not be enough. The deeper consideration is: does Appendix B represent a sufficiently coherent description of what a collection of occupational scientists would call an ‘occupation’ or an array of inter-connected occupations? I propose that “yes” is a defensible answer for the following reasons:

1. The core elements of the SBMPP describe the ‘problematic situation’ that is school-based Medicaid claiming (Cutchin & Dickie, 2012). The Infrastructure core element details much of the enabling context in which the action of documentation (Core Element 3) occurs. Indeed, the motivations and routines, the hardscape affordances, and the culture of the Medicaid program put forth in the Infrastructure section answer Sullivan’s (2001) call for attention to the non-bodily, socio-historical, material factors that comprise the situation. The Teaming and Collaboration core element clarifies how the community relates within and around the enabling context in light of the particular actions comprising the Medicaid program. Finally, the Fiscal and Accountability core elements provide markers and processes for assessing what healthy, responsible functional coordination of the Medicaid program looks like. While purists in the transactional perspective may find the practice profile design too dissected, tidy, and/or mechanical, I

suggest the approach is a worthy, albeit incomplete, attempt to work within the limits of language. The ongoing, co-constitutive, evolving flow of action-in-context that we call “occupation” is elusive, but efforts to study the whole situation *and* the component parts of both occupations and situations are nonetheless essential (Bailliard, Aldrich, & Dickie, 2013).

2. The critical components and implementation activities are *actions* in which the school district performs as it functionally coordinates the Medicaid program. These actions are, from the lens of pragmatism, how the organization seeks to resolve the problematic situation (Cutchin, 2004). These actions are how administrators support reluctant therapists and skeptical parents, how therapists reconcile educational and medical models of practice, how districts access resources for underfunded programs, and so on. Practice profiles give occupational scientists a way to capture, if only for a contingent, provisional moment, occupation in terms of energetic verbs rather than static nouns, and they authenticate the view of occupation as “holistic, emergent, contextual, and meaning-rich human action” (Shank, 2013, p. 184).
3. This methodology also results in a catalog of observable, teachable, learnable, doable practices that comprise what the community has identified as the occupation competently performed (Holahan, 2013). In culling stakeholder values, knowledge, perspectives, and their unexpected emotions about the Medicaid program, the practice profile approach gives voice to what the community cares about, how it wants the occupation to happen and grow, and what manifestations of the occupation are distinctly unacceptable. No doubt, the results of the study are colored by what data I knowingly and unknowingly privileged and my interpretations therein, but the vetting and usability phases did give the

community the last word, as it were. Further, as I will discuss more fully below, it is anticipated and intended that the tool will undergo local adaptation (Chambers, Glasgow, & Stange, 2013). In this way, end users will adjust and likely improve the practice profile to meet the needs of their community and, as transaction would have it, make changes in local practice to meet their evolving understanding and uptake of what constitutes a well-coordinated, competently operating school Medicaid program.

If, then, one accepts Appendix B as a certifiable description of an organizational occupation, it is worth exploring if there are any advantages of a practice profile approach over existing occupational science methods. What do we gain by research organized in this way? In addition to the alignment with pragmatism and the transactional perspective outlined above, the outcome of a practice profile inquiry approach is...a practice profile. Which is to say, one advantage of this method is its inherent outcome; there is a practical and immediately applicable deliverable when the research ends. Without pre-determining the contents, the practice profile approach has a known outcome in terms of how the results are presented. I am suggesting this packaging of results is a strong demonstration of pragmatism's assertion that inquiry be put to work for and result in human flourishing and the greater good (Jackson, 2009) because timely translation of research and policy to practice is built into the method. As Metz (2016) reported, communities often struggle to deploy research and policy mandates, even with existing manualized programs, to address complex and emerging challenges. The findings of this study mitigate some of that struggle: school district leaders will not have to access an academic journal/find these data in an article, read and cypher federal or state statute, and then create their own structure for applying the information. These are noble endeavors, but in the under-funded,

over-worked field of public education, few staff have time for this type of synthesis. Here, the data are already in usable, teachable, actionable form.

Finally, that this study focused on funding for public education via public funding for healthcare services for students with disabilities lends support to the suggestion that it serves as a demonstration of how occupational scientists can and do promote in social justice, inclusion, and participation (Whiteford & Pereira, 2012). Students with disabilities and/or healthcare needs are vulnerable populations for whom services are inadequately funded and improperly staffed due to workforce shortages. School and community services for these students are often fragmented and inconsistent due to multiple system barriers (e.g., incompatible policies across agencies, limited staff time for care coordination, confidentiality and data sharing restrictions, ineffective efforts to engage families, etc.). District and school leaders are understandably focused on educational outcomes for students and are often not well-versed in meeting student health care needs.

Likewise,

health policy decision makers remain largely unfamiliar with this “hidden system” of [school] health care. It is not operated by mainstream health care organizations, it is not commonly reimbursed by third-party payers, and its ways of doing business are rarely scrutinized in major health services research journals... as a result, the health care community has difficulty understanding the basics of school-based health (Lear, 2007, p. 408).

As such, by seeking to facilitate exemplary access to Medicaid reimbursement, this study does social justice work through a practical policy and systems integration approach to improving conditions for a vulnerable population of students (Jansson, 2007).

5.1.2.2. Additional Implications for Occupational Science. A few additional implications flow out of this packaging/translation argument. First, this project positions research itself as a type of functional coordination where methodology is selected based on the ends-in-view (Aldrich, 2008). How the data would be leveraged, how the outcomes of the study would

help communities engaged in school-based Medicaid claiming, and how the findings would contribute to my work as a Medicaid consultant in public education all informed my ends-in-view and, as such, what methods I selected. Second, as mentioned previously, this work embraces and extends the notion that, while our understanding of occupation is always provisional, contingent, and temporary because occupation is “a dynamic, constantly developing, unpredictable phenomenon” (Aldrich, 2008, p.152), inquiry is not futile. Our findings are not immediately and hopelessly obsolete because the occupation under study has already flowed on and beyond our momentary efforts to describe and harness it for social good. Rather, inquiry into occupation can be viewed as a kind of knowledge and practice growth (Aldrich & Cutchin, 2012), given, at least in this study, the anticipation of local modification. In other words, I am endorsing a view of transactional-perspective driven research which positions findings as cumulative contributions to what is known about a given occupation. Yet more, I suggest additions and adjustments to findings should be not simply tolerated, but planned for and facilitated. Chambers, Glasgow, and Stange’s (2013) work with the Dynamic Sustainability Framework is instrumental here:

In this era of ‘crowd sourcing,’ of exponentially-expanding processing power and global connectedness, we no longer need to adhere to a view that once created, interventions and healthcare settings must be ‘frozen’ to optimize effectiveness. Instead, we propose...to reconfigure the research-practice-policy interface, in which the best possible information is gathered and used in real time to inform policy, improve practice, and answer the highest priority research questions (p. 10).

Somewhat related to this discussion is an issue occupational science started with, perhaps unwittingly, in at its inception in the early 1990s. Spurred on by Rudman et al.’s (2008) encouragement at self-reflection within the discipline, I confess my consternation with a long-standing assumption in occupational science that to inform, support, and improve occupational therapy (the initial impulse for the science), occupational science simply needs to produce

reliable data about occupation (Yerxa, 1989). Even while some of the early scholars (Clark, et al., 1991) were cautious about occupational science becoming a shackled servant to occupational therapy—and suggested the science would need freedom to deal in abstractions not directly applicable to practice—the tacit supposition was that, *somehow*, the science would help practitioners better advocate for clients and disenfranchised populations (Whiteford, 2000), have more effective ideas and approaches for practice, and enable the creation of just-right challenges (Yerxa, et al., 1989). The assumption has a few connected problems, with the troubling business of knowledge translation being the issue germane to this project. According to Sussman, Valente, Rohrbach, Skara, & Pentz, (2006), the widespread proliferation of research evidence in health care professions has come nowhere close to anticipated implementation; indeed, current estimates suggest it takes between 15-20 years for original research to be translated into routine practice. Either occupational science deemed itself immune to this fact by virtue of its symbiotic relationship to occupational therapy, or it had discovered a secret method for not only getting evidence into practitioners' minds, but also changing the way they practice in light of new information. The point is, simply having more information about occupation is not going to automatically make better occupational therapists. As in so many other fields, the state of the science and the state of the art operate in parallel dimensions (Dearing & Kee, 2012). While some efforts at infusing occupational science scholarship into occupational therapy practice exist, most are happening in pre-service education of occupational therapists (Dickie, 2016; Hooper, Krishnagiri, Taff, Price & Bilics, 2016). I am hopeful this study opens a door for a more deliberate transactional relationship between in-service occupational therapy practitioners and occupational scientists through the proliferation of more ready-to-apply packaging of research findings.

In that spirit, I want to return to a Chapter 2 reference regarding the occupational profile. In the Occupational Therapy Practice Framework, 3rd Edition, (OTPF-3, AOTA, 2014), occupational profiles are part of the occupational therapy evaluation process and are developed from client history information, usually through an interview at the initial meeting between client and therapist. The profile provides background information related to why the client is seeking services and what he/she hopes to accomplish by participating in therapy. While occupational performance shapes the therapist's interpretation of the client's history and goals, I have never fully understood why the profession opted to call this part of the evaluation an occupational profile (AOTA, 2002). It is a *client* (or patient) history or profile, which is what most other healthcare professions call this portion of the evaluation, and I am not clear what was gained by naming it differently. That said, based on the findings of this study and my prior work with practice profiles, I would offer the practice profile structure as a more accurate and theoretically consistent rendering of a genuine occupational profile because the focus of a practice profile is the whole situation—the action-in-context—and not primarily the individual client. The practice profile methodology allows researchers and practitioners to transcend the insufficiencies inherent in the individual-experience approach which Cutchin, Dickie, and Humphry (2006) questioned and countered when they first put forward the transactional perspective.

5.1.3. Implications for Implementation Science. In this final section, I make a case for how the second part of this study's second aim—to enhance the theoretical base in implementation science—has been accomplished. As I traced in the literature review, implementation science emerged from the diffusion of innovations paradigm of the 1950s (Dearing & Kee, 2012). Since then, cascades of change theory development can be traced through healthcare, education, technology, and business sectors, and, to be clear, implementation

science has proffered its share of theoretical work (Greenhalgh, Robert, Macfarlane, Bate, & Kyriakidou, 2004; Klein & Sorra, 1996; Leeman, Baernholdt, & Sandelowski, 2007). Indeed, Grol, Bosch, Hulscher, Eccles, & Wensing (2007) provide an especially relevant and helpful synthesis and taxonomy of change theories in health care. However, the majority of this scholarship has been focused on how implementation works rather than the philosophical traditions in which implementation science is situated. My argument, as an occupational scientist operating from the transactional perspective is that implementation science instantiates the central tenets of pragmatism and could be helped by adopting this philosophical tradition as a unifying framework. Having sketched that position by highlighting the features of pragmatism in implementation science made most apparent in this research, I will address how pragmatism might serve as a guide for further development in implementation science.

5.1.3.1. Manifestations of Pragmatism in Implementation Science. I need to begin with a disclaimer: I acknowledge I am not an implementation scientist and there is a certain hubris in doing theoretical work on someone else's disciplinary turf. I am an experienced implementation practitioner, however, and it is well within the implementation science spirit and literature for a stakeholder like myself to wrestle with and seek to enhance its internal consistency and resources. If implementation science itself were seen as innovation, then Greenhalgh et al.'s (2004) description is particularly apt:

People are not passive recipients of innovations. Rather (and to a greater or lesser extent in different persons) they seek innovations, experiment with them, evaluate them, find (or fail to find) meaning in them, develop feelings (positive or negative) about them, challenge them, worry about them, complain about them, 'work around' them, gain experience with them, modify them to fit particular tasks, and try to improve or redesign them—often through dialogue with other users (p. 598).

As such, this study exposed several existing points of alignment between the pragmatism undergirding the transactional perspective on occupation and implementation science. To

illustrate those existing connections, I will focus on: 1) the provisional nature of knowledge; 2) growth; 3) inquiry in the name of promoting human flourishing; and 4) functional coordination of problematic situations (Aldrich & Cutchin, 2012; Cutchin & Dickie, 2012). From there, I will discuss how Dewey's constructs of habit, action, and embodiment (Cutchin, 2013; Holahan, 2013) may address some of the gaps in the practice profile methodology identified in this study.

As I have discussed previously, implementation science assumes innovations (school-based Medicaid programs in this study) will undergo ongoing adjustment to achieve local contextual fit after implementation has occurred (Chambers, Glasgow, & Stange, 2013; Damschroder, Aron, Keith, Kirsh, Alexander, & Lowery, 2009) and this process (Moore, Mascarenhas, Bain, & Straus, 2017). It would take effort to avoid the stark similarities between how implementation science accepts and invites dynamic, persistent modification of innovations and Dewey's argument for the contingent character of knowledge (Cutchin, 2008). For Dewey, "knowledge derived from the process of inquiry is provisional, and propositions about a situation are best considered 'warranted assertions.'" (Cutchin, Dickie, & Humpry, 2016, p.4). Very closely related to this shared position on the propositional and temporary nature of knowledge/innovation is the notion of growth. "Dewey defines growth as unending opportunities to freely embody and function in concert with an always changing and uncertain situation" (Aldrich & Cutchin, 2012, p.18). In implementation science, this understanding of growth aligns with the assumption that, while local implementation needs to uphold the indispensable components of an innovation, changes at the adaptable periphery will likely lead to overall improvements in the innovation (Damschroder, Aron, Keith, Kirsh, Alexander, & Lowery, 2009). My point here and in the rest of this section is, implementation science operates within several such assumptions

and pragmatism may offer an opportunity to establish a more coherent, theoretically sound science in light of the complementarity.

Another example of this alignment is the reason implementation science exists in the first place, which is to investigate systematic ways of translating research evidence and policy into practice, primarily in human service fields, so as to improve the health, education, and well-being of those served (Fixsen, Blase, Metz, & Van Dyke, 2013). Two Deweyan constructs stand out in this. First is Dewey's assertion that all inquiry comes with responsibility to make and improve access to "goods—excellencies of all kinds" to promote the flourishing of as much of the citizenry as possible (Boivert, 1998, p. 45), which implementation science does through improving services. Second, implementation science seeks to resolve the "wicked problem" of knowledge translation, installation, and sustainment (Rittel & Webber, 1973). From a pragmatic perspective, this cycle of intentional practice change is the 'problematic situation' implementation science aims to 'functionally coordinate' through tools for weaving the conditions of the local situation with the essential features of the innovation. In so doing, implementation methods carry the system through to a new or re-coordinated state (Holahan, 2013). The system in this study is the local school district implementing a Medicaid program and the SBMPP details the how various aspects of the program and internal/external environments operate in a state of continual coordination, or transaction (Cutchin, 2008). All told, the enterprise of implementation science seems very pragmatic to me.

If one accepts pragmatism as a possible over-arching philosophical framework for implementation science, then a test of fit would be how well pragmatism addresses gaps in the discipline's array of resources. For example, this research was conducted using an implementation science method—practice profile development—and some of the findings could

not be readily situated within the methodological structure. Specifically and as referenced in the school-based Medicaid section above, the practice profile does not adequately address or make room for codifying how awareness, support, and challenge of practitioner documentation *habits* impact successful implementation of the Medicaid program. Within Dewey's pragmatism, "habits, in their making, require repeated exposure to similar situations and, in their maintenance, repeated successful coordination of those situations...Habits are silent, background scaffold of effective doing" (Holahan, 2013, p. 5). In focusing on implementation of practices/innovations, practice profile development misses the ground-level force habits have on the extent and speed with which adoption of new practices occur. Given habits are formed over time and maintained because they result in reliable and successful coordination at both individual and organizational levels, they impact implementation. Practitioners and communities hold on to what works, even in the face of an innovation that purports to work better, because these habits represent embodied and often unconscious action (Aldrich & Cutchin, 2013). Inclusion of habits as a clearly articulated aspect of practice profile development (e.g., adding an interview question like, "What habits do _____ [practitioners, administrators, recipients of services, etc.] display when the program is functioning well?") could lend strength and integrity to implementation efforts by capturing these otherwise backgrounded realities. Further, an intentional consideration of habit might make room for the affective responses to systems change as manifested in the deep stories about Medicaid programs in this study. Habit change is uncomfortable for most potential adopters and organizations may be helped by anticipating and planning for emotion-laden resistance as implementation unfolds. Currently, implementation science offers little guidance for how to address the affective aspects of practice change; pragmatism provides some of those resources.

This suggests another subtle weakness in the practice profile methodology, namely the prioritization of articulating teachable, learnable, doable practices without also adequately considering the learning, doing practitioner. Practices are embodied; they are actions constituted through humans (Sullivan, 2001). Based on the practice profile data collection focus, the level of description yielded situates program participants as somewhat generic role fillers. Adopting a fuller view of pragmatism in implementation science might humanize, inform, and help calibrate the depth at which implementation efforts begin and are maintained. My sense is that implementation that does not understand or account for embodied action and habits will likely stall and problem-solving will be insufficient and/or misdirected until the root cause of human habit is explored and addressed.

5.1.3.2. Additional Implications for Implementation Science. A few final implications of these findings for implementation science are worth noting. First, the content and the additional layer of sorting in the Infrastructure critical components is an innovation in practice profile design and may be a function of this study's focus on practices at the organizational, rather than individual, level. Stakeholder perspectives and the documents reviewed in this study identified several essential features of the Medicaid program context, which resulted in the unanticipated organizational and leadership driver sections of the Infrastructure core element. The implication for future practice profile development is that when organizations or communities are the focus, practices for creating an enabling context for implementation will likely emerge alongside the practices inherent in the innovation itself. Similarly, the vetting experts' ordering of the five core elements to communicate the sequence and cycle of attention Medicaid program leaders need to give during planning and implementation was also a minor

innovation. Future guidelines for practice profile development might articulate this ordering strategy to streamline local implementation efforts.

5.2. Limitations

As with most unfunded, time-limited projects, the scope of this study is a limitation. The sample sizes across the three study phases were small enough to limit any real generalization of results and, as such, most of the implications are theoretical and/or speculative. Also, given the project's focus on North Carolina school districts and policies, use of the practice profile in other states will require alignment to those policy and practice contexts. Another methodological limitation is that the study did not include direct observation of a Medicaid program in action. I did not see or take field data on the practices in the SBMPP; the findings are all stakeholder report filtered through my history and experience as a school-based Medicaid participant and consultant. While this is in keeping with the methodology as described in the literature (Metz, 2016) and there is no guarantee that observation data would be any less subjective, the results must be interpreted as the combined perspective of 35 people. In terms of the results, it is not clear how the practice profile core elements relate to one another and fit/flow together; the assumption is coherence will be achieved in practice. This is not a limitation unique to this study and, as noted above, not the only gap in the practice profile approach.

5.3. Opportunities for Future Research

Clearly, several prospects for future work flow directly from this study's limitations. An immediate extension could include field observation of Medicaid documentation practices, training and technical assistance sessions, meetings with parents where Medicaid was discussed, and central office planning sessions. Additional on-site data collection methods, such as practitioners keeping reflective journals, time studies, and use of actual demographic and reimbursement data, would also lend greater weight and impact to implementation of school

Medicaid programs. Additionally, use and adaptation of the SBMPP in other states would be instructive to track, as would comparison of districts first implementing Medicaid programs and those with established programs in terms of SBMPP utility.

As mentioned in section 5.1.1.3 above, data from the usability testing phase of the project may point to immediate next steps for this project. Clearly, more can be learned from broader field testing, including increasing the sample size and scope of usability testing districts, allowing districts to identify themselves to enable follow-up, and adding a feedback item specific to novel or unexpected features of the practice profile. This seems especially timely as charter schools will be included in the NC LEA Medicaid claiming program in the near future; testing the use of the SBMPP as a guide for program start-up (versus existing program evaluation) would be a logical extension of this work.

Aside from specific improvements on this project, future collaborations and connections between occupational science and implementation science seem ripe. Conversations and inquiry related to increased dissemination, utilization, and impact of occupational science research will be greatly enhanced by deeper knowledge of implementation science frameworks and methods. For implementation science, a more robustly occupational and transactional understanding of what is being implemented has significant potential to bolster the discipline, and development of pragmatism as an organizing theory remains a ripe option. For both disciplines, opportunities to be more curious and attentive to the affective dimensions of both occupation and implementation are also worth considering.

5.4. Conclusion

This project traced the similarities in the evolution of occupational science and implementation science to justify an experiment in meshing theoretical and methodological strengths of both disciplines on behalf of a public good. Findings from the research resulted in a

pragmatic tool North Carolina school districts implementing Medicaid claiming programs can leverage for program assessment and improvement planning. In addition, the investigation revealed unexpected affective aspects of school Medicaid programming which may point to the need for greater inclusion of emotion as a relevant and powerful construct in both occupational science and implementation science. The study also provided space for analyzing methodological decisions in occupational science and specifically the transactional nature of methods and utilization of occupational science scholarship for promotion of social justice. Finally, suggestions for enhancing the theoretical underpinnings of implementation science through an analysis of its alignment with pragmatism was provided as an avenue for ongoing development of disciplinary resources.

APPENDIX A: IN-PERSON VETTING AGENDA

August 1, 2018

9:00a – 12:00pm **Broad Reflection Phase:**

A fine-tuning protocol (McDonald & Allen, 2017) was used to focus on document content and design in light of project goals and provide an efficient structure for project overview, clarification, study/feedback preparation, feedback, and researcher reflection on feedback. Vetting stakeholders received the first draft of the School-based Medicaid Practice Profile (SBMPP v.1) via email one week prior to the meeting and were asked to prepare questions and comments related to: what needed clarification; what they liked; and what they wondered might improve the tool.

Meeting Location:	Durham Public Schools Staff Development Center	# of Participants	7
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Component	Notes
<p>Clarification (5 minutes):</p> <p>Clarifying questions are matters of fact. Save substantive issues for later.</p> <p>PI is responsible for making sure clarifying questions are really clarifying.</p>	<p>Infrastructure: 1.3 – may need to clarify that tech is addressed elsewhere 1.1 may need to better define participation – more articulate reference to PE and JD</p> <p>Who will use this tool?</p> <p>Driver headings are useful depending on user</p> <p>Define relevant</p> <p>Will there be examples in the Expected Performance columns</p> <p>Teaming and Collaboration 2.4 – what does this look like? What does it mean? Use different term than ‘coordination’</p> <p>Doc 3.5</p> <p>Lots of discussion about now 1.8 What does a ‘0’</p>

	<p>Fiscal Do we need to add student-centered language? More specificity on how reimbursements are used, not just compliant but right</p>
<p>Feedback (5 minutes):</p> <p><i>“I like”</i></p> <p>Participants share what they like about the profile.</p> <p>PI stays quiet during this time.</p>	<p>Infrastructure Flow of 1.1-1.3 makes sense Like connection to PE</p> <p>Like 1.10-there’s a lot there, implies data sharing, that people know how the program is doing; there’s work to be done here</p> <p>T&C Like that 2.2 names families as informed stakeholder 2.3 addresses duplication issue but also informs family anxiety; education of families is really important</p> <p>Fiscal Like 5.1 and</p>
<p>Feedback (5 minutes):</p> <p><i>“I wonder”</i></p> <p>Participants ask reflective questions about potential areas in which the profile can be enhanced.</p> <p>PI stay quiet during this time.</p>	<p>Infrastructure Wonder if it could be used as a teaching tool for practitioners; used as both a top-down and bottom improvement tool; diagnostic if collaboratively used</p> <p>Do we need to add “compliant” to list of adjectives for the web-based platform</p> <p>1.10 may be tricky to define expected performance</p> <p>Negative program perspective re: extra work and no practitioner benefit</p> <p>T&C Simply 2.1 language Does this need to include some provision of time/logistics for teaming? This is part of workload</p> <p>Doc: Change ‘blind’ to ‘without knowledge of Medicaid enrollment’</p> <p>Fiscal Element that is more explicit re: reimbursement; 5.2 needs to say funds go to EC programs</p>

<p>Reflection (5 minutes):</p> <p>PI shares thoughts and reflections on the feedback that was received. Indicates potential areas to modify.</p>	<p>No notes taken during this time, given I was talking.</p>
<p>I have (5 minutes):</p> <p>Participants offer potential resources that would support/enhance the profile.</p>	<p>Participants had no additions, given the literature and document review that was used to create SBMMPP v.1.</p>

1:00pm – 3:30pm Function-specific Phase:

Stakeholders responded to the Infrastructure critical components and used a modified consensus process to establish the implementation activities (i.e., *expected*, *developmental*, and *needs improvement* metrics) for those 12 components. The response structure followed this line of inquiry:

- 1) Is this a critical component of the program or for practitioners?
 - A. If NO, should it be included within another critical component or removed?
 - B. If YES, are the core activities measurable and observable?
- 2) What changes or additions are recommended?
- 3) What additional literature should be reviewed?
- 4) Are more perspectives needed?
- 5) What are the expected levels of performance for this component?

ORDER OF ELEMENTS:

Medicaid so about money—does it make sense to have Fiscal last? Flip Accountability and Fiscal? Make Infrastructure no. 1. Order by priority/temporal sequence.

ADDITIONAL LIT SEARCH:

Investigate industry standard for high expectations for ‘satisfied’ - When an offering meets the customer’s expectations, the customer is satisfied; the better products get, the more it takes to satisfy consumers; The two general components are the customer’s expectations and whether the

organization performed well enough to meet them. A third component is the degree of satisfaction, or to put it in terms we've used to describe exceptional performance, is the customer delighted?

Souki, G. and Cid G. Filho, "Perceived Quality, Satisfaction and Customer Loyalty: An Empirical Study in the Mobile Phones Sector in Brazil," *International Journal of Internet and Enterprise Management* 5, no. 4 (2008): 298–314.

3:30pm - 4:00pm Wrap-up

Group determined next steps:

- I would:
 - complete the remaining implementation activities for all critical components
 - seek additional literature/resources and incorporate findings
 - draft the introduction and purpose section
 - send the complete second draft (v. 2) back to the vetting group for review within one week of the in-person meeting
- The vetting team would:
 - review and comment on v.2 within one week of receiving it
 - not comment if he/she could support v.2 as written

The terms of the agreement were upheld and vetting team member comments/edits were incorporated. In addition to the original seven vetting team members, v.2 of the practice profile was also made available for review by nine additional stakeholders to incorporate a more a national perspective and the expertise of an implementation science specialist. Altogether, comments and edits from 16 reviewers were synthesized to build the third draft of School-based Medicaid Practice Profile (SBMPP v.3). In preparation for usability testing, the tool was then translated to a fillable PDF format to facilitate ease of use in the field.

APPENDIX B: USABILITY TESTING FEEDBACK RESULTS

1. The School-based Medicaid Practice Profile does what it is supposed to do for district teams.

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Please select your level of agreement.	2.00	2.00	2.00	0.00	0.00	3

#	Answer	%	Count
1	Strongly agree	0.00%	0
2	Somewhat agree	100.00%	3
3	Neither agree nor disagree	0.00%	0
4	Somewhat disagree	0.00%	0
5	Strongly disagree	0.00%	0
	Total	100%	3

2. The School-based Medicaid Practice Profile design matches its purpose.

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Please select your level of agreement.	2.00	2.00	2.00	0.00	0.00	3

#	Answer	%	Count
1	Strongly agree	0.00%	0
2	Somewhat agree	100.00%	3
3	Neither agree nor disagree	0.00%	0
4	Somewhat disagree	0.00%	0
5	Strongly disagree	0.00%	0
	Total	100%	3

3. Our team was able to do what it wanted to do with the School-based Medicaid Practice Profile.

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Please select your level of agreement.	1.00	3.00	2.33	0.94	0.89	3

#	Answer	%	Count
1	Strongly agree	33.33%	1
2	Somewhat agree	0.00%	0
3	Neither agree nor disagree	66.67%	2
4	Somewhat disagree	0.00%	0
5	Strongly disagree	0.00%	0
	Total	100%	3

4. When using the School-based Medicaid Practice Profile, did your team become confused at any point?

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	4. When using the School-based Medicaid Practice Profile, did your team become confused at any point?	1.00	2.00	1.25	0.43	0.19	4

#	Answer	%	Count
1	Yes	75.00%	3
2	No	25.00%	1
	Total	100%	4

4a. If yes, at what point did your team become confused? (Please cite applicable Core Element and/or Critical Component numbers.)

Item 1.6: "Leveraged" for multiple system purposes (?), item 2.2 parents never ask about Medicaid other than if it will affect private providers also billing for same service, item 4.3 Finance office was not available to assist with answering this item

5. When using the Practice Profile, did your team get distracted or encounter challenges/barriers?

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	5. When using the Practice Profile, did your team get distracted or encounter challenges/barriers?	1.00	2.00	1.25	0.43	0.19	4

#	Answer	%	Count
1	Yes	75.00%	3
2	No	25.00%	1
	Total	100%	4

5a. If yes, describe the challenges/barriers you encountered. (Please cite applicable Core Element and/or Critical Component numbers.)

1.1 One physical therapist expressed concerns about the job description not including Medicaid based info. It was explained that our HR dept. does not want a too specific job description and that "appropriate reporting and data collection" in the job description would cover Medicaid. 4.1 This component brought about discussion as to how different service providers look at workload with the personnel allotment and their varied view on how to accurately show a therapist's workload. And further comments were made about ensuring practitioners/therapists are allotted their time for documentation while balancing other school duties. It would help have a different question asked.

Our team did not know we needed to implement items 1.1, 1.7, 1.11, 2.3, 4.1, or 5.2

error-meant to check no and would not allow to go back

6. Our team will use the School-based Medicaid Practice Profile for annual program assessment going forward.

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Please select your level of agreement.	3.00	4.00	3.33	0.47	0.22	3

#	Answer	%	Count
1	Strongly agree	0.00%	0
2	Somewhat agree	0.00%	0
3	Neither agree nor disagree	66.67%	2
4	Somewhat disagree	33.33%	1
5	Strongly disagree	0.00%	0
	Total	100%	3

7. Our team recommends other school districts and charter schools use the School-based Medicaid Practice Profile for program assessment and improvement planning.

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Please select your level of agreement.	2.00	3.00	2.33	0.47	0.22	3

#	Answer	%	Count
1	Strongly agree	0.00%	0
2	Somewhat agree	66.67%	2
3	Neither agree nor disagree	33.33%	1
4	Somewhat disagree	0.00%	0
5	Strongly disagree	0.00%	0
	Total	100%	3

8. How would your team describe the School-based Medicaid Practice Profile in its own words?

It is a tool to review how a district is managing not only how effectively the services are provided to students but also how the management its our time and funds are being utilized. It is a helpful tool in honestly assessing the district's strengths and weaknesses, seeing what is being done well and what needs some improvement.

Some of the items wording such as "leveraging" and "building capacity" is somewhat vague and not clear, but overall the Profile gave us aspects to consider in the future regarding the many implications of accessing the Medicaid program for school based therapy services.

It would be good for LEAs that know they have needs for improvement for their Medicaid program.

9. Is there anything else you would like to say about the School-based Medicaid Practice Profile?

Please add a question under Fiscal Management about cost pools and contracts. As of now, there is insufficient guidance.

no

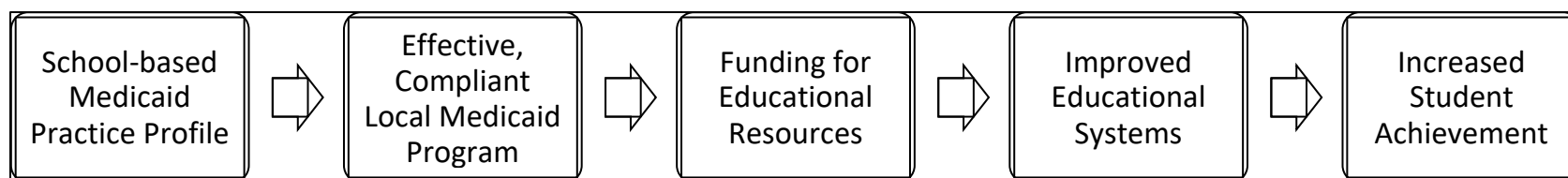
APPENDIX C: SCHOOL-BASED MEDICAID PRACTICE PROFILE

Program Features and Competencies for School Districts, Charter Schools, and Practitioners

Project Completed Version - October 16, 2018

Introduction and Purpose

The *School-based Medicaid Practice Profile* is designed to help North Carolina school districts and charter schools articulate the present level of their Medicaid program performance and plan for improvement. Other state and federal entities are encouraged to tailor the tool to meet their regulatory mandates. The theory of action for this student-centered tool is:



Simply put, the intended return on investment of time and resources to complete the *School-based Medicaid Practice Profile* is improved student outcomes. For a more thorough description of the history and purpose of school-based Medicaid programs, click [here](#). The Individuals with Disabilities Education Improvement Act (PL108-446, IDEA, 2004) requires Local Education Agencies (LEAs) to access students' public insurance benefits before using IDEA funds for special education and related service (IDEA Sec. 300.154(a)(1)). In addition to public education regulations, LEAs must comply with policies set forth by the state Medicaid agency to be reimbursed for some services provided to students with disabilities who are Medicaid enrolled, and some state Medicaid agencies have a policy specifically written for LEA providers. The braiding of policies and educational and medical models of service delivery in school-based Medicaid inserts a unique ethical program dimension; this practice profile provides a pragmatic structure for addressing the most common of these ethical tensions.

A practice profile is an aspirational picture of a given program; few if any programs meet all the expectations for full implementation when analyzed using a practice profile. Further, many programs that are new or in transition may not have all the data needed to respond to each item in the practice profile. Nonetheless, the tool can be used by an LEA or charter school with a Medicaid program at any stage of development to assess strengths, resources, and areas needing improvement. This practice profiles focuses on: a) determining where a school-based Medicaid program is based on qualitative and quantitative standards; b) designing plans to improve the program; and c) measuring the effectiveness of improvement efforts. Practice profiles are not intended for program compliance measurement, but they can be an effective means of building capacity in staff implementing the program. For more information on practice profiles, click [here](#).

Suggested Team Members

The *School-based Medicaid Practice Profile* should be administered by a team of stakeholders which may include:

- Practitioners (e.g., therapists, nurses, audiologists, school psychologists, social workers)
- LEA central office administrators of:
 - Exceptional Children Programs
 - Student Services
 - Finance and Payroll
 - Human Resources
 - Information Technology
- Parents
- Community providers, including Local Management Entity-Managed Care Organization (LME-MCO) representatives

Philosophical Principles

School-based Medicaid programs are guided by specific values and principles in their routine operations, including:

- *Student-centered practice* – focus on student outcomes by providing services that are individualized, holistic, educationally relevant, and equitable regardless of student Medicaid status; avoid administrative convenience and prioritization of reimbursement
- *Integrity* – enact honesty, accuracy, validity, truthfulness, and ethical and legal operations
- *Evidence-based practice* – build capacity for and implement effective interventions
- *Stewardship* – demonstrate fiscal efficiency and responsibility with tax payer dollars without creating extra work for practitioners
- *Continuous program improvement* – seek to continually improve to program effectiveness and efficiency

Core Elements, Critical Components, and Implementation Activities

The *School-based Medicaid Practice Profile* is organized into five major categories of program operations called Core Elements, which include:

- *Infrastructure*
- *Teaming and Communication*
- *Practitioner Documentation*
- *Fiscal Management*
- *Accountability and Monitoring*

Within each core element, critical components of the category are identified, and for each critical component an array of implementation activities are provided as examples of three program developmental levels. As such, for each critical component, the LEA selects the development level that best fits its current level of Medicaid program functioning, per the following guidelines:

2=Expected – program participants generalize required skills and abilities to wide range of settings and contexts; the critical component is upheld consistently and independently; the program is sustained and improved over time. Words used to describe expected/proficient activities may include “consistently, all of the time, and in a broad range of contexts.”

1=Developmental Variation – program participants implement required skills and abilities, but in a more limited range of contexts and settings; the critical component is upheld inconsistently or need supervisor/coach consultation for application; the program would benefit from a coaching agenda that targets particular features for improvement in order to move into the “expected/proficient” category. Words used to describe developmental activities may include “some of the time, somewhat inconsistently, in a limited range of contexts.” This column helps to define the coaching agenda.

0=Needs Improvement - program participants are not yet able to implement required skills or abilities in any context. Often times, if the critical component is falling into the needs improvement category, there may be challenges related to the overall implementation. For example, there may be issues related to staff selection and/or training, managing the Medicaid program, or using data to inform continuous improvement. Words used to describe needs improvement activities include “none of the time, inconsistently.” This column helps to prioritize the improvement plan.

Core Element 1: Infrastructure

For this Core Element, consider how the LEA develops, improves, sustains implementation of, and creates an enabling context for the Medicaid program for the benefit students and their families.

<i>Critical Component</i>	<i>Expected Implementation (Rate as 2)</i>	<i>Developmental Variation (Rate as 1)</i>	<i>Needs Improvement (Rate as 0)</i>	<i>LEA Rating</i>	<i>Documentation and Comments</i>
Competency Drivers					
1.1 Participation in the Medicaid program is included in job descriptions, contracts, interviews, and performance evaluation tools and is consistent across job-alike categories for personnel involved in Medicaid Administrative Claiming (MAC) and fee-for-service (FFS) programs.	Standardized language for Medicaid participation is included in job descriptions, contracts, and performance evaluations (via observation or review of Medicaid-related artifacts) for 100% of employed and contracted personnel involved in Medicaid programs.	Standardized language for Medicaid participation is included in job descriptions, contracts, and performance evaluations (via observation or review of Medicaid-related artifacts) for at least 75% of employed and contracted personnel involved in Medicaid programs.	Standardized language for Medicaid participation is included in job descriptions, contracts, and performance evaluations (via observation or review of Medicaid-related artifacts) for less than 75% of employed and contracted personnel involved in Medicaid programs.		
1.2 Personnel involved in MAC/FFS programs receive initial orientation and ongoing training and coaching on role-specific responsibilities related to the Medicaid program.	100% of employees/contractors receive initial Medicaid program orientation within 30 days of hire and attend at least 1 annual staff meeting/PLC/professional learning session that includes Medicaid content.	At least 75% of employees/contractors receive initial Medicaid program orientation within 30 days of hire and attend at least 1 annual staff meeting/PLC/professional learning session that includes Medicaid content.	Less than 75% of employees/contractors receive initial Medicaid program orientation within 30 days of hire and/or do not attend at least 1 annual staff meeting/PLC/professional learning session that includes Medicaid content.		
1.3 Personnel involved in MAC/FFS programs receive timely and satisfactory technical assistance (TA) on Medicaid-related policy,	1) 100% of personnel report knowing how to contact help desk/TA providers. 2) TA is provided within 24 hours of request.	1) At least 75% of personnel report knowing how to contact help desk/TA providers. 2) TA is provided within 48 hours of request.	1) Less than 75% of personnel report knowing how to contact help desk/TA providers. 2) TA is provided more than 48 hours after request.		

practice, and technology issues.	3) Satisfaction survey results re: technical assistance indicate at least 90% of users are satisfied.	3) Satisfaction survey results re: technical assistance indicate at least 70% of users are satisfied.	3) Satisfaction survey results re: technical assistance indicate less than 70% of users are satisfied.		
			TOTAL FOR THIS SECTION: _____ / 6		
Critical Component	Expected Implementation (Rate as 2)	Developmental Variation (Rate as 1)	Needs Improvement (Rate as 0)	LEA Rating	Documentation and Comments
Organization Drivers					
1.4 Materials, supplies, and space for service provision, including a documentation device and secure internet connection, are provided to personnel involved in MAC/FFS programs.	1) Personnel have LEA-provided internet access at least 50% of every work day. 2) 100% of FFS personnel have documentation device access at least 50% of every work day. 3) At least 90% of personnel report they have materials/ resources needed to do their Medicaid-related duties.	1) Personnel have LEA-provided internet access at least 33% of every work day. 2) 100% of FFS personnel have documentation device access at least 33% of every work day. 3) At least 70% of personnel report they have materials/ resources needed to do their Medicaid-related duties.	1) Personnel have LEA-provided internet access less than 33% of every work day. 2) 100% of FFS personnel have documentation device access less than 33% of every work day. 3) Less than 70% of personnel report they have materials/ resources needed to do their Medicaid-related duties.		
1.5 A user-friendly, secure, compliant, web-based documentation platform that supports all required documentation types (e.g., plan of care, date-of-service notes, etc.) and provides 1) auto-text; 2) uploading capability; 3) business rules; 3) reminders; 4) reporting; 5) embedded progress monitoring with	The documentation platform is user-friendly, secure, compliant, web-based, and includes at least 4 of 5 features listed in description.	The documentation platform is user-friendly, secure, compliant, web-based, and includes at least 3 of 5 features listed in description.	The documentation platform is not user-friendly, secure, compliant, or web-based, and includes 2 or fewer of 5 features listed in description.		

<p>graphic displays is used by FFS personnel as their primary documentation tool.</p>					
<p>1.6 Data entered in the documentation platform is accessible and applicable for multiple system purposes by users with appropriate credentials.</p>	<p>Documentation data is used for at least 2 other LEA processes in addition to Medicaid claim preparation, including but not limited to:</p> <ol style="list-style-type: none"> 1) FTE calculation/ personnel allotments 2) timeliness 3) workload assessment 4) student progress monitoring 5) service and IEP alignment verification 6) policy monitoring 7) budget management 	<p>Documentation data is used for at least 1 other LEA processes in addition to Medicaid claim preparation, including but not limited to:</p> <ol style="list-style-type: none"> 1) FTE calculation/ personnel allotments 2) timeliness 3) workload assessment 4) student progress monitoring 5) service and IEP alignment verification 6) policy monitoring 7) budget management 	<p>Documentation data is not used for other LEA processes beyond Medicaid claim preparation.</p>		
<p>1.7 Effective and efficient protocols for obtaining physician orders (or other licensed practitioner of the healing arts, as specified in Medicaid LEA policy) and parent consents are implemented.</p>	<ol style="list-style-type: none"> 1) LEA has written protocol for obtaining required documents which is reviewed with all personnel involved in FFS programs at least annually. 2) 100% of potentially reimbursable Medicaid claims have valid physician order and parent consent. 3) Parents of at least 80% of all students with IEPs have given consent for accessing Medicaid benefits and receive annual notification regarding ongoing consent. 	<ol style="list-style-type: none"> 1) LEA has written protocol for obtaining required documents which is reviewed with personnel involved in MAC/FFS programs. 2) At least 80% of potentially reimbursable Medicaid claims have valid physician order and parent consent. 3) Parents of at least 60% of all students with IEPs have given consent for accessing Medicaid benefits and receive annual notification regarding ongoing consent. 	<ol style="list-style-type: none"> 1) LEA does not have a written protocol for obtaining required documents. 2) Less than 80% of potentially reimbursable Medicaid claims have valid physician order and parent consent. 3) Parents of fewer than 60% of all students with IEPs have given consent for accessing Medicaid benefits and receive annual notification regarding ongoing consent. 		

1.8 Claims for services provided at school are submitted under the LEA Medicaid provider number.	100% of providers are submitting data for claim preparation on behalf of the LEA/under the LEA Medicaid provider number.	At least 75% of providers are submitting data for claim preparation on behalf of the LEA/under the LEA Medicaid provider number.	Less than 75% of providers are submitting data for claim preparation on behalf of the LEA/under the LEA Medicaid provider number.		
			TOTAL FOR THIS SECTION: _____ / 10		
<i>Critical Component</i>	<i>Expected Implementation (Rate as 2)</i>	<i>Developmental Variation (Rate as 1)</i>	<i>Needs Improvement (Rate as 0)</i>	<i>LEA Rating</i>	<i>Documentation and Comments</i>
Leadership Drivers					
1.9 LEA Medicaid program administrators advocate internally and externally for Medicaid program supports and integrity, including reasonable rates and policies, supportive working conditions, and adequate staffing and salaries.	Program administrators analyze Medicaid data and policy at least quarterly to advocate for program improvement with 2 or more of the following partners: 1) parent advocacy organizations 2) other LEA central office leadership 3) Division of Health Benefits 4) Department of Public Instruction 5) professional associations 6) billing vendor	Program administrators analyze Medicaid data and policy at least annually to advocate for program improvement with at least 1 of the following partners: 1) parent advocacy organizations 2) other LEA central office leadership 3) Division of Health Benefits 4) Department of Public Instruction 5) professional associations 6) billing vendor	Program administrators do not consistently demonstrate Medicaid program advocacy efforts.	.	
1.10 LEA Medicaid program administrators create a positive culture through celebration of program improvement/ successes, fostering practitioner confidence and	Program administrators cultivate a positive LEA Medicaid culture with 2 or more of the following annually:	Program administrators cultivate a positive LEA Medicaid culture at least 1 of the following annually: 1) Recognition of excellent staff performance related to Medicaid	Program administrators do not consistently make efforts to cultivate a positive LEA Medicaid culture.		

<p>competence, managing program-related anxiety, and addressing ethical tensions.</p>	<p>1) Recognition of excellent staff performance related to Medicaid 2) Conducting annual Medicaid open forum/town hall 3) Including Medicaid as a standing agenda item on staff meetings 4) sharing Annual Medicaid performance report with stakeholders 5) Conducting annual MAC/FFS personnel working conditions survey</p>	<p>2) Conducting annual Medicaid open forum/town hall 3) Including Medicaid as a standing agenda item on staff meetings 4) sharing Annual Medicaid performance report with stakeholders 5) Conducting annual MAC/FFS personnel working conditions survey</p>			
<p>1.11 The LEA allocates some portion of an FTE for a Medicaid Program Administrator (MPA) housed in the Exceptional Children, Student Services, or Finance Department.</p>	<p>The LEA fulfills at least 2 of the following for the MPA position: 1) position has a budget allocation, job description, and performance evaluation 2) provides/funds annual Medicaid-related professional learning opportunities 3) makes the MPA contact information widely known/easily accessible</p>	<p>The LEA fulfills at least 1 of the following for the MPA position: 1) position has a budget allocation, job description, and performance evaluation 2) provides/funds annual Medicaid-related professional learning opportunities 3) makes the MPA contact information widely known/easily accessible</p>	<p>The LEA does not have a designated Medicaid Program Administrator (MPA).</p>		
			<p>TOTAL FOR THIS SECTION: _____ / 6</p>		

Core Element 2: Teaming and Communication

For this Core Element, consider how the LEA supports collaboration and active involvement of stakeholders in all aspects of the Medicaid program for the benefit students and their families.

Critical Component	Expected Implementation (Rate as 2)	Developmental Variation (Rate as 1)	Needs Improvement (Rate as 0)	LEA Rating	Documentation and Comments
2.1 The LEA uses effective internal communication and teaming structures to support Medicaid policy implementation and practice (i.e., across Exceptional Children, Student Services, Finance, Human Resources, and Information Technology departments, schools, and programs.)	<p>Effective Medicaid teaming and communication is accomplished with 3 or more of the following:</p> <ol style="list-style-type: none"> 1) LEA uses a Medicaid program personnel listserv/email distribution 2) Internal LEA employee webpage includes Medicaid content 3) Cross-departmental central office meetings include Medicaid as standing agenda item 4) Practitioner team meetings/PLCs include Medicaid as standing agenda item 5) Documentation platform message board is updated and reviewed by staff at least weekly 6) Monthly Medicaid utilization reports are sent to relevant staff 7) LEA holds an annual open forum/town hall with Medicaid content and includes parents of students with disabilities 	<p>Effective Medicaid teaming and communication is accomplished with 1 or 2 of the following:</p> <ol style="list-style-type: none"> 1) LEA uses a Medicaid program personnel listserv/email distribution' 2) Internal LEA employee webpage includes Medicaid content 3) Cross-departmental central office meetings include Medicaid as standing agenda item 4) Practitioner team meetings/PLCs include Medicaid as standing agenda item 5) Documentation platform message board is updated and reviewed by staff at least weekly 6) Monthly Medicaid utilization reports are sent to relevant staff 7) LEA holds an annual open forum/town hall with Medicaid content 	<p>The LEA does not employ any of the suggested communication and teaming strategies.</p>		

		and includes parents of students with disabilities			
2.2 The LEA partners with, listens to, and provides education for families and family advocacy entities to support/improve the Medicaid program and demonstrate its importance to student outcomes.	Partnerships with families are established and maintained with 2 or more of the following: 1) LEA sponsored parent groups (e.g., PTA) and events include Medicaid information/ agenda items 2) LEA public web site, newsletters, and social media posts contains information on Medicaid program 3) Parents provide feedback through formal structures (e.g. survey following IEP meeting) which include Medicaid items and data is used for program improvement 4) Parent nights/ fairs/ resource events include Medicaid program information	Partnerships with families are established and maintained with 1 or more of the following: 1) LEA sponsored parent groups (e.g., PTA) and events include Medicaid information/ agenda items 2) LEA public web site, newsletters, and social media posts contains information on Medicaid program 3) Parents provide feedback through formal structures (e.g. survey following IEP meeting) which include Medicaid items and data is used for program improvement 4) Parent nights/ fairs/ resource events include Medicaid program information	The LEA does not employ any of the suggested parent partnership strategies.		
2.3 The LEA collaborates with community stakeholders, including other local and state agencies, vendors, and professional associations to support/improve the Medicaid program and demonstrate its importance to student outcomes.	Partnerships with community stakeholders are established and maintained with 2 or more of the following: 1) LEA has Memoranda of Understanding (MOUs) with community agencies serving Medicaid-enrolled students, which include referral, care coordination, or re-entry protocols	Partnerships with community stakeholders are established and maintained with 1 or more of the following: 1) LEA has Memoranda of Understanding (MOUs) with community agencies serving Medicaid-enrolled students, which include referral, care coordination, or re-entry protocols	The LEA does not employ any of the suggested community stakeholder partnership strategies.		

	<p>2) LEA partners with ECAC, faith-based organizations, and/or advocacy/support groups to provide community education and empowerment efforts which include Medicaid content</p> <p>3) LEA maintains and makes accessible to Medicaid program stakeholders a data-base of community partners</p> <p>4) LEA initiates/sustains contact with state education and state Medicaid resources and technical assistance</p>	<p>2) LEA partners with ECAC, faith-based organizations, and/or advocacy/support groups to provide community education and empowerment efforts which include Medicaid content</p> <p>3) LEA maintains and makes accessible to Medicaid program stakeholders a data-base of community partners</p>			
<p>2.4 LEA service providers collaborate with community providers to coordinate complementary/non-duplicative services for Medicaid-enrolled students, adhering to relevant confidentiality and consent policies.</p>	<p>Collaborative services occur between school and community providers, given required parent consent is obtained and 1 of the following:</p> <p>1) School provider documentation reflects collaboration with community providers</p> <p>2) Community providers are invited to participate in school team meetings for jointly served students</p>	<p>Collaborative services sometimes occur between school and community providers, given required parent consent is obtained.</p>	<p>Collaborative services do not occur between school and community providers.</p>		
			<p>TOTAL FOR THIS SECTION: _____ / 8</p>		

Core Element 3: Practitioner Documentation

For this Core Element, consider the ways the LEA monitors and ensures effective, efficient completion of required documentation generated by practitioners (e.g., evaluations/re-evaluations, plans of care, date-of-service notes, progress reports, delegation/supervision logs, etc.).

Critical Component	Expected Implementation (Rate as 2)	Developmental Variation (Rate as 1)	Needs Improvement (Rate as 0)	LEA Rating	Documentation and Comments
3.1 Documentation is individualized/specific to the student and supports monitoring of student progress on goals and age-/grade-level standards.	At least 90% of documented services contain quantitative and qualitative student performance data that is compared over time to calculate if the student is: 1) learning at a rate necessary to meet individualized goals 2) -learning at a rate necessary to close performance gaps on age-/grade-level standards	At least 75% of documented services contain quantitative and qualitative student performance data that is compared over time to calculate if the student is: 1) learning at a rate necessary to meet individualized goals 2) -learning at a rate necessary to close performance gaps on age-/grade-level standards	Less than 75% of documented services contain quantitative and qualitative student performance data that is compared over time to calculate if the student is: 1) learning at a rate necessary to meet individualized goals 2) -learning at a rate necessary to close performance gaps on age-/grade-level standards		
3.2 Documentation complies with requirements under practitioner's license, student's program, and Medicaid policy.	100% of internally audited documentation complies licensure, education, and Medicaid policy and no corrective action/recoupment is required following external audit.	At least 95% of internally audited documentation complies licensure, education, and Medicaid policy and/or minor corrective action/recoupment is required following external audit.	Less than 95% of internally audited documentation complies licensure, education, and Medicaid policy and/or significant corrective action/recoupment is required following external audit.		
3.3 Practitioners complete required documentation without knowledge of Medicaid enrollment of students served.	Practitioners do not know Medicaid status of students served and have no variation in documentation of educationally relevant/	Practitioners do not know Medicaid status of students served and have no variation in documentation of educationally relevant/	Practitioners know the Medicaid enrollment of students and vary documentation practice		

	license-necessary practice based on student Medicaid enrollment.	license-necessary practice based on student Medicaid enrollment.	based on student Medicaid status.		
3.4 Documentation is completed in a timely manner, accessible, and leveraged for multiple audiences/programs, including Medicaid claim preparation, without duplicated effort.	100% of completed documentation is: 1) completed within one week of service provision 2) written one time/in one platform 3) accessible for transfer/copy/paste across different policy/program platforms 4) written language appropriate for a variety of audiences/policies	At least 75% of completed documentation is: 1) completed within one week of service provision 2) written one time/in one platform 3) accessible for transfer/copy/paste across different policy/program platforms 4) written language appropriate for a variety of audiences/policies	Less than 75% of completed documentation is: 1) completed within one week of service provision 2) written one time/in one platform 3) accessible for transfer/copy/paste across different policy/program platforms 4) written language appropriate for a variety of audiences/policies		
			TOTAL FOR THIS SECTION: _____ / 8		

Core Element 4: Fiscal Management

For this Core Element, consider the way the LEA monitors fiscal resources and ensures compliance with federal and state policies regarding Medicaid programs to ensure resources are maximized for students.

Critical Component	Expected Implementation (Rate as 2)	Developmental Variation (Rate as 1)	Needs Improvement (Rate as 0)	LEA Rating	Documentation and Comments
4.1 The LEA uses a workload model which includes Medicaid program participation to calculate and employ appropriate FTE allocation for all participant categories.	Practitioners are allotted at least 15 minutes of documentation time for every 60 minutes of service provided.	Practitioners are allotted at least 10 minutes of documentation time for every 60 minutes of service provided.	Documentation time is not included in work time allocation for practitioners.		
4.2 The LEA ensures use of Medicaid reimbursement payments complies with federal, state, and local regulations while maximizing programs benefits for students and families.	Medicaid reimbursements meet 2 or more of the following criteria: 1) 100% of Medicaid FFS reimbursements are allocated to Exceptional Children programs 2) at least 10% of Medicaid FFS reimbursements are allocated to practitioner supports/programs 3) 25% of MAC reimbursements are allocated to Exceptional Children programs	100% of Medicaid FFS reimbursements are allocated to Exceptional Children programs.	100% Medicaid FFS reimbursements are not allocated to Exceptional Children programs.		
4.3 The LEA ensures funding of all salaries, contracts, and Medicaid program costs, complies with federal, state, and local regulations.	Fiscal compliance includes both of the following: 1) the annual Medicaid cost report is accurate and compliant 2) the LEA calculates the percentage of time	Fiscal compliance includes both of the following: 1) the annual Medicaid cost report is accurate and compliant 2) the LEA uses state or local funds for all FTE of all	The LEA does not submit an accurate and compliant annual Medicaid cost report and/or does not track funding sources of salaries for practitioners		

	practitioners participate in Medicaid programs and uses state or local funds for the FTE percentage allocated to Medicaid programs	practitioners participating in Medicaid programs	participating in Medicaid programs.		
4.4 The LEA implements procedures for maximizing Medicaid utilization/return on investment and minimizing risk and impact of recoupment and/or corrective action.	Fiscally sound Medicaid programs are established and maintained with 2 or more of the following: 1) monthly review of Medicaid program data 2) annual internal Medicaid fiscal audits 3) 20% Medicaid reimbursements are held for potential recoupment 4) the LEA analyzes its cost pool data/membership at least annually	The Medicaid program includes as least 1 of the following: 1) quarterly review of Medicaid program data 2) annual internal Medicaid fiscal audits 3) 10% Medicaid reimbursements are held for potential recoupment 4) the LEA analyzes its cost pool data/membership at least annually	The Medicaid program does not include fiscal integrity analysis.		
			TOTAL FOR THIS SECTION:	_____ / 8	

Core Element 5: Accountability and Monitoring

For this Core Element, consider the way the LEA monitors and ensures compliance with federal and state policies regarding Medicaid programs.

Critical Component	Expected Implementation (Rate as 2)	Developmental Variation (Rate as 1)	Needs Improvement (Rate as 0)	LEA Rating	Documentation and Comments
5.1 LEA has an effective system for general supervision and internal monitoring of its Medicaid program.	The LEA monitors compliance of its Medicaid program with 3 or more of the following: 1) quarterly service verification 2) monthly monitoring of accuracy/compliance/timeliness of service documentation 3) quarterly workload/FTE allocation analysis 4) quarterly employment data validation for Medicaid Administrative Claiming (MAC) personnel pool 5) annual internal Medicaid audit	The LEA monitors compliance of its Medicaid program with 2 or more of the following: 1) quarterly service verification 2) monthly monitoring of accuracy/compliance/timeliness of service documentation 3) quarterly workload/FTE allocation analysis 4) quarterly employment data validation for Medicaid Administrative Claiming (MAC) personnel pool 5) annual internal Medicaid audit	The LEA monitors compliance of its Medicaid program with 1 of the following: 1) quarterly service verification 2) monthly monitoring of accuracy/compliance/timeliness of service documentation 3) quarterly workload/FTE allocation analysis 4) quarterly employment data validation for Medicaid Administrative Claiming (MAC) personnel pool 5) annual internal Medicaid audit		
5.2 The LEA builds capacity for Medicaid program compliance with stakeholders, including MAC/FFS participants, administrators, contracted providers, and parents.	The LEA promotes stakeholder compliance in its Medicaid program by providing all of the following: 1) at least 4 hours of training annually on Medicaid policy and practice, including content on the relationship of	The LEA promotes stakeholder compliance in its Medicaid program by providing at least 2 of the following: 1) at least 2 hours of training annually on Medicaid policy and practice, including content on the relationship of	The LEA promotes stakeholder compliance in its Medicaid program by providing at least 1 of the following: 1) at least 2 hours of training annually on Medicaid policy and practice, including content on the relationship of		

	<p>educational relevance and medical necessity</p> <p>2) Medicaid policy updates within 10 days of policy change</p> <p>3) technical assistance on policy (in collaboration with state agencies as needed) within 48 hours of stakeholder request</p>	<p>educational relevance and medical necessity</p> <p>2) Medicaid policy updates within 30 days of policy change</p> <p>3) technical assistance on policy (in collaboration with state agencies as needed) within 1 week of stakeholder request</p>	<p>educational relevance and medical necessity</p> <p>2) Medicaid policy updates within 30 days of policy change</p> <p>3) technical assistance on policy (in collaboration with state agencies as needed) within 2 weeks of stakeholder request</p>		
<p>5.3 The LEA facilitates practitioner peer review of documentation for cross-program/policy compliance, quality, and utilization.</p>	<p>Peer review program has 3 of the following features:</p> <p>1) peer review sessions are held at least monthly</p> <p>2) a peer review protocol is used for each type of documentation</p> <p>3) at least 25% of practitioners have work peer-reviewed annually</p> <p>4) findings from peer review sessions are analyzed annually to inform future program improvement</p>	<p>Peer review program has 2 of the following features:</p> <p>1) peer review sessions are held at least quarterly</p> <p>2) a peer review protocol is used for each type of documentation</p> <p>3) at least 10% of practitioners have work peer-reviewed annually</p> <p>4) findings from peer review sessions are analyzed annually to inform future program improvement</p>	<p>The LEA does not have a documentation peer review process.</p>		
<p>5.4 The LEA publicly reports on its Medicaid program performance.</p>	<p>The LEA prepares an annual Medicaid program report including data on utilization, reimbursement amounts/ allocations, audits, and recoupment and shares the report on communication outlets used for other internal and public reporting.</p>	<p>The LEA prepares an annual Medicaid program report including data on utilization, reimbursement amounts/ allocations, audits, and recoupment.</p>	<p>The LEA does not prepares an annual Medicaid program report.</p>		

			TOTAL FOR THIS SECTION: _____ / 8
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