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Research Evidence Use in EPSDT Dental Medicaid Class Action Lawsuits

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SYNOPSIS

Little is known about research evidence use in dental Medicaid class action lawsuits. In this qualitative study, we developed a conceptual model to understand the role of dentists and how research evidence was used. We conducted archival analyses and interviewed 15 key informants. Dentists had key roles requiring scientific expertise or clinical experience serving vulnerable populations. Most evidence was newly generated data rather than based on existing sources. Dentists were involved in all phases of the lawsuit. Future research should identify conditions fostering research evidence use in dental Medicaid lawsuits and whether high-quality research evidence use improves child health outcomes.

Keywords

Medicaid; research evidence; policy decision making; research use; EPSDT; dental services; evidence-based dentistry; children

Introduction

The Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) program was enacted in 1967 to ensure that Medicaid-enrolled children have access to health care services, including comprehensive dental care. Nevertheless, access to dental care has been limited for many children in Medicaid. The barriers to care are well documented.^{1–7} To address this problem, Medicaid enrollees have filed lawsuits against state Medicaid dental programs alleging EPSDT violations, resulting in consent decrees – settlements that enforce the provision of EPSDT dental benefits to child Medicaid enrollees.⁸ Two recent EPSDT

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lawsuits resulted in consent decrees: *Frew v. Ladd* in Texas and *Hawkins v. Commissioner* in New Hampshire.

Frew v. Ladd (Civil No. 3:93CV65) was initiated in 1993 in Texas (Table 1). There were four causes of action against the state:

1. failure to inform families about EPSDT dental benefits;
2. underperformance on annual dental utilization goals, with only 17% of eligible children receiving a dental screening;
3. failure to provide follow-up treatment after screenings; and
4. differential provision of dental services to Medicaid-enrolled versus privately-insured children.

In 1995, after two years of evidence collection, negotiations, and drafting of the consent decree, a federal court in Texas ruled that the class had standing. The consent decree was deemed to be fair and enforceable. Following the 1996 *Frew* order, the state appealed to have the consent decree terminated. In 2004, the U.S. Supreme Court ruled that the consent decree did not violate the constitution and agreed with the district court ruling to uphold the consent decree. Some of the remedies within the consent decree have been implemented. The case is ongoing.

Hawkins v. Commissioner (Civil No. 99–143-JD) was filed in 1999 in New Hampshire (Table 1). In 2004, a New Hampshire federal court ruled that the class had standing. The negotiated consent decree was deemed fair and enforceable. The *Hawkins* consent decree was enforced for five years. It ended in 2010 after a one-year extension when the court determined the state had met the terms of the consent decree.

The extent to which research evidence is used in dental Medicaid lawsuits is unclear, which is a concern from an evidence-based perspective because these processes may not always take into account available scientific evidence.⁹ Dental lawsuits provide opportunities to understand how research evidence is used and generated. Knowledge exchange frameworks have been used to conceptualize interactions between researchers, policymakers, and practitioners.¹⁰ These frameworks identify actors and the interactions between actors and research evidence.^{11–14} Previous work in dentistry has examined the connections between research, policy, and health care reform, but no studies to date have used knowledge exchange frameworks to understand the use of research evidence in dental Medicaid lawsuits.^{15–18}

The goal of the study was to better understand how research evidence is part of legal and policymaking processes in dental Medicaid lawsuits. Based on case studies from Texas and New Hampshire, there were three study aims:

1. to identify the main actors in dental lawsuits;
2. to characterize the research evidence either used or generated; and
3. to develop a conceptual model describing the relationship between actors and research evidence.

Methods

This was a two-phase qualitative study involving archival analyses and key informant interviews. We used archived documents from each case to identify the case dockets and focused on the findings of fact in the original complaints, transcripts of the court hearing, court decisions, and consent decrees.^{19,20} Legal documents were obtained from the Public Access to Court Electronic Records (PACER) service.²¹ For the archival analyses, we focused on eight case dockets (Table 2).

Based on the archival analyses, we developed a semi-structured script for the key informant interviews (Box 1). Discussion topics included:

1. interviewee's role in the case and connections to other actors;
2. perceptions on barriers and facilitators of dental care for Medicaid children;
3. the use or generation of research evidence in the lawsuit; and
4. consent decree remedies.

Case dockets were used to identify potential study participants who were recruited by phone or email. We used purposive and snowball sampling techniques to identify additional participants.²² We interviewed six attorneys, three expert consultants, one expert witness, three practitioner witnesses, and two state health administrators. To ensure anonymity, we excluded additional information about the interviewees.

Participants consented verbally. Interviews were conducted by phone, lasted 60 to 90 minutes, and were digitally recorded. The recordings were transcribed by a professional transcription service. The accuracy of each transcript was verified prior to analysis.

We used a knowledge exchange framework to guide data analyses.^{10,14,23} Data were coded inductively to identify the actors, describe the types of evidence used or generated, and to delineate the relationships among the actors and evidence. We used a content analysis approach to analyze the data and develop a conceptual model.²⁴ The study was approved by the Institutional Review Board of the University of Washington.

Results

Question 1. Who were the actors in the dental Medicaid lawsuits?

There were five categories of actors: beneficiaries, attorneys, evidence purveyors, judges, and implementers (Table 3).

Beneficiaries—These were Medicaid-enrolled children who failed to receive dental care (referred to as plaintiffs). Beneficiaries initiated the lawsuits with the help of legal aid lawyers. As one dentist explained:

“Pretty much everything [legal aid] do[es] is motivated by [beneficiaries] coming to them seeking legal help. [Legal aid] didn't start by saying, ‘We're going to take on a cause.’ It is more that they have been working trying to help individual clients and

they were hearing this repeated over and over again – that [dental care access] was a problem.”

A legal aid attorney explained they “had a lot [of clients] that had dental problems with real small children...their teeth were rotting out and these parents didn’t know that they could even get treatment or where.”

Attorneys—Responsibilities of plaintiff and defense attorneys included deposing witnesses, preparing information for review by opposing counsel, requesting and collecting research evidence, negotiating the consent decree, and prioritizing remedies.

Plaintiff Attorneys: Plaintiff attorneys pursued legal action on behalf of beneficiaries. The main goal was to prove the state had violated EPSDT by failing to provide dental care to children. Once the case moved forward, plaintiff attorneys drafted the initial consent decree remedies and negotiated the final consent decree with defense attorneys.

Defense Attorneys: According to a defense attorney, the state “maintained it was complying with Medicaid and EPSDT requirements for dental care.” The initial goal was to get the case dismissed by attributing low utilization rates to dentists who refused to treat Medicaid patients and families that failed to obtain care for their children. After the consent decree was deemed enforceable, defense attorneys were then responsible for demonstrating improvements to the Medicaid dental program so the consent decree would be dismissed.

Evidence Purveyors—These actors produced data, provided testimony, and interpreted research for the attorneys, and included state health administrators, practitioner witnesses, expert witnesses, and expert consultants.

State Health Administrators: State health administrators provided attorneys with raw claims and eligibility data from the Medicaid program and dental utilization information generated for the Centers for Medicare and Medicaid Services (CMS). These actors included the state Medicaid Director and dental Medicaid Director.

Administrators for the defense explained how policies prior to the lawsuit were based on outdated professional standards. For example, parents were told that a child’s first dental visit should occur by age 3 years, and not by age 1 as recommended by the American Academy of Pediatric Dentistry. A state health administrator explained “there weren't dental or health people running” the Medicaid program. Another example was the American Dental Association (ADA) guideline recommending two preventive dental visits each year as a metric for tracking dental utilization for children. When they used this metric, they found that dental utilization rates for the state “were abysmal.” An administrator explained that the consent decree had prompted the state Medicaid program to consult with professional organizations and experts within dental schools to ensure that assessment measures were based on up-to-date professional standards.

Practitioner Witnesses: Practitioner witnesses shared their experiences providing care to Medicaid-enrolled children and representing the profession’s interests. These actors included dentists and state dental association representatives.

In both states, practitioner witnesses agreed that dental care access was a problem for children in Medicaid. A plaintiff attorney explained that “some of the dentists who started refusing to participate in the Medicaid dental program...would tell us that it just wasn’t affordable.” In addition, dentists mentioned “paperwork hassles” as the other major barrier to Medicaid participation: the paperwork was complex and Medicaid program staff was not always available to answer questions. Another issue was “swamping” when an overwhelming number of patients would seek care from the only Medicaid dentist in a local area. State dental association representatives presented data on the number of practicing dentists in the state as well as clinical guidelines.

Expert Witnesses: Expert witnesses testified on various aspects of the consent decree, including remedies to solve the problems with Medicaid. Expert witnesses included local academics affiliated with public health programs and dental schools. Unlike practitioner witnesses, expert witnesses provided data-based rather than anecdotal testimonies. A plaintiff attorney said that selecting expert witnesses did not mean telling the witness “‘here is exactly what we want you to say.’... We sent them copies of the [consent decree]...then we asked them what they thought about particular things...They would tell us and we would follow up with more probing questions.”

Expert witness testimonies helped attorneys craft evidence-based remedies, such as coverage of dental sealants in children who might not otherwise receive them. Policies to reimburse dentists for sealants on Medicaid-enrollees older than age 14 years in the *Frew* consent decree were based on expert witness testimony on “the [varying] eruption patterns of children and teeth, [meaning] not every child would be able to have this done by the 14th birthday...the lifting of that age limit widen[ed] the window [to] provide this preventive procedure.”

Expert Consultants: These actors provided attorneys with data to set the context for legal arguments and develop consent decree remedies, but did not testify in court. Expert consultants included nationally recognized academic researchers. One plaintiff attorney explained that expert consultants “helped frame the complaint...not only writing the complaint, but what kinds of [dental] issues were most important and how those issues in general related to our clients’ particular experience.” Other responsibilities included “advising us about what kinds of provisions would be the most helpful in settlement negotiations and also what [the expert witness] thought about the provisions the state was proposing and why they might not work” and how to implement consent decree remedies. An expert consultant explained that his role was to “interpret what was going on...[and provide] an independent analysis of [the state’s] data.”

Judges—Judges directly influenced the policy making process based on their ability to approve or deny the consent decree. The judges in *Frew* and *Hawkins* did not draft the consent decree, but had the plaintiff and defense attorneys work together to negotiate a document. Judges listened to the evidence presented in support of the consent decree, evaluated the proposed remedies, and arbitrated on the appropriateness and fairness of the consent decree. Judges eventually approved consent decrees in both states. Afterwards, their

primary responsibility was to enforce the terms of the consent decree. Judges could hold a state in contempt if the state failed to carry out agreed upon terms.

Implementers—These actors were responsible for implementing the remedies, either by enacting policies to encourage dentists to treat children in Medicaid or providing dental care services. There were two types: the state health and human services (HHS) commissioner and practitioners.

State HHS Commissioner: The state HHS commissioner was the defendant named in the lawsuits, but “once the judge ordered him to do something, the state Health and Human Services Commissioner, became the implementer.” The commissioner was responsible for requesting additional funding from the state legislature to finance remedy implementation, for appointing managers to administer the Medicaid program, and for overseeing programs aimed at eliminating barriers to care (e.g., transportation, insufficient beneficiary knowledge about benefits, shortage of Medicaid dentists). One attorney described the state HHS commissioner as “very astute politically...this guy was adept at moving the money to where the lawsuits were...[he] moved money to the Medicaid dental program to hire more staff” that enabled the state to carry out the consent decree remedies.

Practitioners: Practitioners were the dentists who would ultimately be responsible for providing care to children in Medicaid. These dentists worked in private practice offices, community health centers, and dental management organizations. When reimbursement rates were increased as part of the consent decree remedies, more dentists were expected to become active Medicaid providers. Dentists and their supporting staffs received administrative training on how to process Medicaid claims to minimize delays and rejections. Practitioners also received “cultural sensitivity training” consisting of “modules...about the realities of EPSDT recipients’ lives to attempt to improve providers’ attitudes toward recipients” including limited access to telephone services to schedule and cancel appointments, transportation difficulties, and a lack of childcare.

Question 2: What research evidence was generated and used in the lawsuit process?

Research evidence was presented through depositions, affidavits, expert consultations, and witness testimonies. There were two types of research evidence. The first was use of existing evidence and the second was generation of new evidence.

Use of Existing Research Evidence—In the *Frew* case, dental utilization rates were initially derived from the annual 416 reports the state was required to submit to CMS. These 416 reports contained basic information about EPSDT, such as the number of children who received dental screenings, treatment referrals, and follow-up treatment. These reports were used to monitor individual state performance and allow for state and national comparisons.

Attorneys used federal reports and academic journal articles to document the barriers to dental care for low-income children. Based on the research literature, witnesses provided testimonies on ways to improve oral health. One witness explained sealants “are the most effective preventive technology since fluoride,” but noted that many dentists in clinical

practice were not placing sealants. Published research was used to justify remedies. An attorney recalled”

“An article was published [comparing] the cost of early preventive dental care...to the cost of treating dental problems in kids who didn't get early preventive dental care...Cost is always a consideration for the state...The primary focus is on the health of the children and the well-being of the children, but if you have research that shows that something is cost-effective, then that helps both sides.”

Generation of New Research Evidence—The *Hawkins* consent decree involved generating dental utilization rates that were empirically derived from claims data provided by the Medicaid program. Baseline and multiple follow-up analyses were conducted by expert consultants to monitor progress on consent decree remedies.

In *Frew*, the oral health status of Medicaid-enrolled children was evaluated via clinical assessment to estimate the percentage of children with dental disease and the numbers of children requiring hospitalization for treatment of dental disease. Initially, plaintiff and defense attorneys agreed to a one-time clinical assessment. However, as the case progressed, contention arose:

“because some of the things plaintiffs wanted us to look at [as health outcomes] were things that we couldn't do from claims data alone. They really wanted [multiple assessments of] health outcomes, but when you're stuck with only administrative data, there's really a lot of limits to what you could do about health status. They wanted...quality of life inventories...and it was just prohibitively expensive...But we ultimately agreed to a set of...[claims-based] measures.”

Defense and plaintiff attorneys also commissioned new research to help substantiate legal arguments based on local data. Lawyers worked with state dental associations to administer surveys to dentists as a way to identify the reasons for low participation in Medicaid. An expert consultant found that “dentists weren't that busy and they could see these patients.” Two of the main barriers to dental care were low reimbursement rates and the perception of bad beneficiary behavior, such as being more likely to miss appointments as well as the perception that Medicaid patients do not follow health care instructions.

Texas state health administrators collected qualitative research from beneficiaries to measure client satisfaction that they “couldn't address with the claims administrative data” alone. In addition, defendants in *Frew* commissioned a focus group with beneficiaries in Texas that was cited by the judge as “confirm[ing] many problems that plaintiffs allege.” For instance, focus group data corroborated the claim “that the attitudes of [dentists] and [dentists'] staff are discouraging to the patients” because dentists did not understand the patients' life difficulties, prompting many patients to skip subsequent dental appointments.

Question 3: What were the relationships between actors and research evidence?

Our conceptual model delineates the relationship between actors and how research evidence was generated and used in the Medicaid dental litigation process (Figure 1).

Frew and *Hawkins* began when beneficiaries contacted plaintiff attorneys because they were unable to obtain dental care (Figure 1A). Plaintiff attorneys gathered the beneficiaries' grievances over the course of multiple years before filing suit against the defendants. A Plaintiff attorney described this process as "noticing trends. You start noticing people coming in with problems. 'I can't see a dentist', especially in these rural areas. [Or] 'I can't find a dentist that will take Medicaid, so I can't get my child's dental checkups.'"

After the lawsuits were filed, plaintiff attorneys went to state health administrators to obtain dental utilization data. Plaintiff and defense attorneys argued over the state Medicaid program's ability to produce "data on Medicaid dental care because they had archived it and...it would cost them a ton of money to resurrect the data from the storage space to someplace that we, [the plaintiffs], could actually read it or use it." An expert consultant with *Hawkins* noted the difficulties obtaining data because the state "didn't really understand the difference between asking for a report as opposed to asking for a copy of the data." The court eventually ruled that the state had to produce the data at their own expense.

Once Medicaid data were obtained, attorneys asked expert consultants to analyze the data and generate utilization rates (Figure 1B₁). Attorneys also requested data on dentists' experiences with Medicaid as well as other sources of research like outcomes data, reports, and peer-reviewed publications (Figure 1B₂). Additionally, attorneys from both sides collected affidavits and depositions from state health administrators and witnesses to craft their arguments about the effectiveness or ineffectiveness of the state's Medicaid program. One plaintiff attorney said their expert witness provided "information about the medical aspect of the dental care...she was providing [us] with a lot of research on [tooth decay]... [She] was a pediatric dentist so she was very knowledgeable about...[the] research being done."

With ongoing input from expert witnesses and consultants, plaintiff and defense attorneys worked together to write and negotiate the final consent decree (Figure 1B₃). According to one of the attorneys, "we met every day for weeks on end." One practitioner witness recalled the process involved "lots of negotiations back and forth on how is the best way to make known [which dentists accept] Medicaid" because relying on counts of dentists who at one point accepted Medicaid was an inaccurate way to compile a registry. He explained that "in New Hampshire there are 600 dentists [on record] that see Medicaid and they are all over the state. That is not the case...in reality, maybe there are 75 that actually see a number of Medicaid kids."

The negotiations in both cases were contentious at times, but relations improved over time with both sides focusing on "do[ing] what we need to do for the kids" and eventually coming together to address the problems everyone acknowledged. According to an expert consultant, this was a unique aspect of the consent decree negotiation and writing process because prior to the lawsuits:

"there [were] standard of care issues. The state's bureaucrats don't know. They are not dental people. They don't know what the standard of care should be or what the services are that should be available and they make rules, arbitrary rules, and

sometimes it happens that they get advisory committees made up of people who are not scholarly, who don't know the literature.”

Once the proposed remedies were registered in court, the judges called a hearing to listen to testimonies, review the evidence, and evaluate the proposed consent decree (Figure 1B₃). One expert consultant observed that the judge had to be “a dispassionate person, so that they're not encumbered by what it's going to cost the State of New Hampshire to fix the system. What they are looking at is inequality, reasonable disparities...the combined impact of this on human beings and so your [judge] is going to make a decision that is based on equality and human principles.” But he added, “They're going to want to see comparative numbers. They're going to want to say, ‘Well, is New Hampshire any worse than Vermont? And are we any worse than any other state in terms of our activity and our treatment of our Medicaid population?’”

Once the consent decree and remedies were approved by the judge, orders were sent to implementers (Figure 1C) who enacted remedies aimed at improving dental care access for beneficiaries (Figure 1D). The remedies included: proposed increases in dental reimbursement rates; an updated registry of Medicaid dentists; and education about EPSDT dental benefits to both beneficiaries and practitioners. A plaintiff attorney noted that the state HHS commissioner became the main implementer. He explained how dentists or “practitioners were implementers [too]. It was the commissioner who decided how to try to reach out to dentists to get them to participate in the [Medicaid] program. So they had a relationship, in remedies [and] implementation.”

Beneficiaries could register new grievances with plaintiff attorneys, leading to the start of another cycle (Figure 1A–D). The *Hawkins* consent decree ended after six years, when the judge determined the improvements were sufficient, even though the state had not met the standards outlined in the consent decree and Medicaid policy – to provide all eligible children with dental care. In *Frew*, beneficiaries refiled grievances. As one *Frew* attorney explained, “there were issues over the years in forcing the terms of the consent decree. That went on for years and years and at one point, the state of Texas tried to get out of the consent decree and the case went to the Supreme Court and [it said] ‘No, a deal's a deal. You went to a consent decree and now you have to comply with the terms of it.’” The *Frew* case is ongoing.

Discussion

In this study, our goal was to understand the extent to which research evidence is used and generated in the processes underlying dental Medicaid lawsuits. We focused on two EPDST case studies – one from New Hampshire and a second from Texas – to identify the actors involved in these processes, points at which research evidence was used and generated, and the relationships between actors and research evidence. There were four main findings.

First, dentists had key roles in both cases that required scientific expertise or clinical experience based on an understanding of vulnerable populations. Dentists serving as expert witnesses or consultants provided evidence-based testimonies and potential remedies to address access problems for children in Medicaid. To do this, dentists had to know how to

identify and interpret the relevant research literature, articulate persisting gaps in scientific knowledge, extrapolate the clinical and policy relevance of studies, and evaluate the strength of scientific evidence for professional guidelines. These basic science literacy skills are not being adequately addressed in the U.S. predoctoral dental school curricula and should be strengthened through competencies.²⁵

Dentists serving as practitioner witnesses testified mainly on the day-to-day difficulties they encountered with the Medicaid program, with most grievances focusing on low reimbursement rates and administrative barriers to dentist participation. Past work highlights the importance of dental Medicaid reimbursement rates in improving dental care use for children, but even in states with the highest reimbursement rates, large proportions of children in Medicaid still fail to see a dentist.^{26,27} Thus, reimbursement rates alone are unlikely to systematically boost utilization unless other barriers to care are addressed. These include attributes of the Medicaid program such as generosity of benefits (e.g., primary molar sealants) and policies that are inconsistent with professional guidelines (e.g., recommending first dental visits by age 3 instead of age 1) as well as patient-level factors such as perceptions that dentists and dental offices are unwelcoming, lack of transportation, and inflexible work schedules.^{25,28,29} Cultural sensitivity training for dentists was part of *Hawkins* consent decree remedies, but it is unclear whether this training made a meaningful difference in the way dentists practiced or in beneficiaries' perceptions of dentists. Public health coursework coupled with sensitivity training early in dental school could help students understand that improving access to care requires more than market-based approaches and reinforce the importance of empathy and flexibility when serving families and children from lower socioeconomic backgrounds.³⁰

Second, most research evidence in the two cases was newly generated. Existing data sources, like publications based on analyses of data from national surveys or other state Medicaid programs, were used to frame the problem (e.g., barriers to dental care exist for children in Medicaid) and provide a rationale for solutions (e.g., sealants reduce disease, preventive dental care is cost-effective). In *Frew*, attorneys started off using data from 416 reports, but eventually to Medicaid claims data from the state to derive utilization rates. In *Hawkins*, New Hampshire claims data were used from the beginning. There are two explanations. First, there was a need to establish baseline metrics that did not exist, which were required to track progress. For claims-based measures, utilization trends could be assessed over time because these data were available. However, because of cost and time constraints, clinical metrics were collected once in *Frew* and not collected in *Hawkins*. By design, this limited the measurable efforts to improve utilization, with no assurance that such efforts would improve health outcomes. Given the paucity of evidence on benefits associated with dental visits, both consent decrees remedies may have been lost opportunities to implement additional Medicaid program reforms aimed at reducing disease, boosting health outcomes, and improving the quality of life for children.^{31,32}

There may also have been a geopolitical need to use local data based on the misperception that local problems make external studies non-generalizable to local conditions. The focus groups and surveys conducted in the two states did not result in substantively new information. Most of the findings derived from these efforts were available in the published

literature.^{26,33–35} The resources devoted to these activities could have been reallocated to more meaningful tasks, such as gathering of longitudinal clinical measures as well as developing consent decree remedies that would be expected to directly reduce disease and improve health outcomes. Examples of the latter are home and community-based programs to improve use of fluoridated toothpastes and to reduce added sugar intake.^{36,37} Future efforts should consider implementation of evidence-based behavior change remedies that have the potential to optimize outcomes associated with consent decrees.

Third, the conceptual model helps to further delineate the role of dentists in Medicaid lawsuits. Dentists were involved in all phases of the lawsuit, from interpreting beneficiaries' grievances on behalf of attorneys, analyzing and interpreting data used to draft the consent decree, testifying during hearings, and implementing remedies as ordered by the judge. This indicates that dentists are not passive bystanders in the legal and health policymaking processes. At times, dentists play critical information brokering roles between beneficiaries and attorneys or attorneys and judges.³⁸ There are specific responsibilities associated with brokering and skills needed in evidence-based policymaking, including knowing how to objectively interpret scientific findings and data, understanding when clinical guidelines and remedies are evidence-based (and when they are not) and the strength of the evidence, and being able to accurately communicate this information to policymakers.^{39,40}

An example illustrating the importance of these skills relates to a recent publication on early preventive dental visits for children in Medicaid. This study reported that early visits were not associated with less dental disease and were not cost-savings.³² These findings are inconsistent with the study that an interviewed attorney cited on the cost-effectiveness of early preventive dental care, which has not been replicated since it was published in 2004.⁴¹ Most practicing dentists believe early visits are important, but may not understand that there is weak empirical evidence on the value of prevention. This does not imply that prevention is meaningless. It is an indication that science has not caught up to clinical practice, and underscores the importance of evidence-based dental practice that balances science, craft knowledge, and other factors.⁴² High-quality brokering and policymaking requires dentists to understand these nuances and to be able to communicate them to the public. These skills are especially important in the current political climate in which citizens, journalists, and policymakers are increasingly questioning the value of public expenditures, including health care spending, and alternative facts are used to justify policy decisions.⁴³

Finally, the study underscores the ultimate goals of dental Medicaid lawsuits against states brought forth by marginalized populations – individual and collective social justice – and raises the question of the degree to which justice was actually served. At the individual level, reparations for the named plaintiffs were limited to attorney fees and the promise that families would receive support services so their children could access dental care guaranteed to them under EPSDT. There was no financial compensation for the time off from work parents may have taken to search for a Medicaid dentist, the multiple evenings spent waiting in hospital emergency rooms for a physician to provide the child suffering from toothaches with non-definitive treatment in the form of antibiotics, or for the learning that failed to take place in the classroom because the child in dental pain could not concentrate. Not all of these consequences of untreated tooth decay are directly attributable to inadequate access to

dental care, but in a health delivery system that blocks the disadvantaged from accessing dental care services that are guaranteed by law, the health system is at least partially responsible.

In terms of collective social justice, states with a history of dental consent decrees may be able to boost dental utilization rates in the short-term, but large proportions of Medicaid-enrolled children still do not utilize care. For instance, in New Hampshire, 24.4% of Medicaid enrollees under age 21 years had an annual dental visit in 2002 during the pre-consent decree period.⁴⁴ Based on the most recent published data from 2011, the rate is 60%, which is only slightly higher than the national state-level average for children in Medicaid.⁴⁵ Furthermore, some families in Medicaid continue to have problems finding dental care for their children, which motivated the refiling of grievances in Texas. This is a particular concern because it is taking place after initial consent decree remedies have been implemented and at a time when the state Medicaid dental program is being closely scrutinized. How far programs regress in the post-consent decree is unknown and open for empirical evaluation. And as stated previously, it is unclear whether consent decrees have meaningfully improved the oral health status of children in these states. These unresolved questions bring into question the narrow parameters in which collective social justice is framed and whether the approach taken in dental Medicaid consent decrees needs to be scrutinized and revamped. At this time, evidence-based approaches offer the greatest opportunity to improve the oral health and make a difference in the lives of children in Medicaid.

Future research should identify the conditions that foster use of research evidence in dental Medicaid lawsuits and whether use of high-quality research evidence improves oral health outcomes of Medicaid-enrolled children. In addition, there is a need to evaluate how researchers in dentistry and public health can better facilitate communication of study findings to attorneys and health scholars. The traditional mode of publishing in peer-reviewed journals and presenting at academic conferences may not be a sufficient method of knowledge transfer.

This is one of the first known studies to examine Medicaid dental lawsuits to understand how research evidence is used and generated in the policymaking process. This study is an important step in understanding the role dental researchers and clinicians have in communicating evidence and formulating health policies that affect publicly-insured children. However, there are three main limitations. First, we selected two states as case studies, which means that our conceptual model may not be generalizable to all states with a dental consent decree history. Second, the study focused on archived materials from the original filing to consent decree approval, limiting the scope of analysis to the first few years of litigation in process lasting decades. Third, the cases were initially filed in the 1990s, which limited the number of individuals we were able to recruit. In particular, we had hoped to include beneficiaries as part of the key informant interviews, but were unable to locate them.

In summary, dental researchers and clinicians play a critical role in dental Medicaid lawsuits aimed at improving the dental care delivery system for vulnerable children. Future efforts

should continue to focus on developing strategies to incorporate the highest-quality research evidence into consent decree remedies to ensure that children can also have the opportunity to benefit from dental disease prevention and improvements in quality-of-life and overall health.

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KEY POINTS

- Dentists had key roles in both cases that required scientific expertise or clinical experience based on an understanding of vulnerable populations.
- Most research evidence in the two cases was newly generated data rather than being based on existing data.
- The conceptual model linking actors to research evidence helps to further delineate the role of dentists in Medicaid lawsuits and indicates that dentists were involved in all phases of the lawsuit.
- The study underscores the ultimate goals of dental Medicaid lawsuits against states brought forth by marginalized populations – individual and collective social justice – and raises the question of the degree to which justice was actually served.

Box 1

Semi-Structured Script for Key Informants Interviews

Description of the interviewee's involvement

How did you become involved in the case?

What was your relationship to the issue?

Description of dental access for Medicaid-enrolled children

What was the state of dental care access for Medicaid children before the lawsuit was filed? What part of this triggered the lawsuit?

Was there disagreement over this?

What were some of the proposed measures prior to filing the lawsuit?

Who proposed them? What kind of data did they use as evidence? How were they negotiated?

Description of the use of research evidence

Who were the key players in the lawsuit? How did they participate? What kind of expertise did they contribute?

What influence did literature (academic journal articles, agency generated white papers, news articles) have as evidence?

Description of the consent decree remedies

Tell me about the process that led to increased reimbursement rates for dentists.

Tell me about the process to update the registry/lists of dentists.

Tell me more about the process of doing outreach and education for dentists and patients.

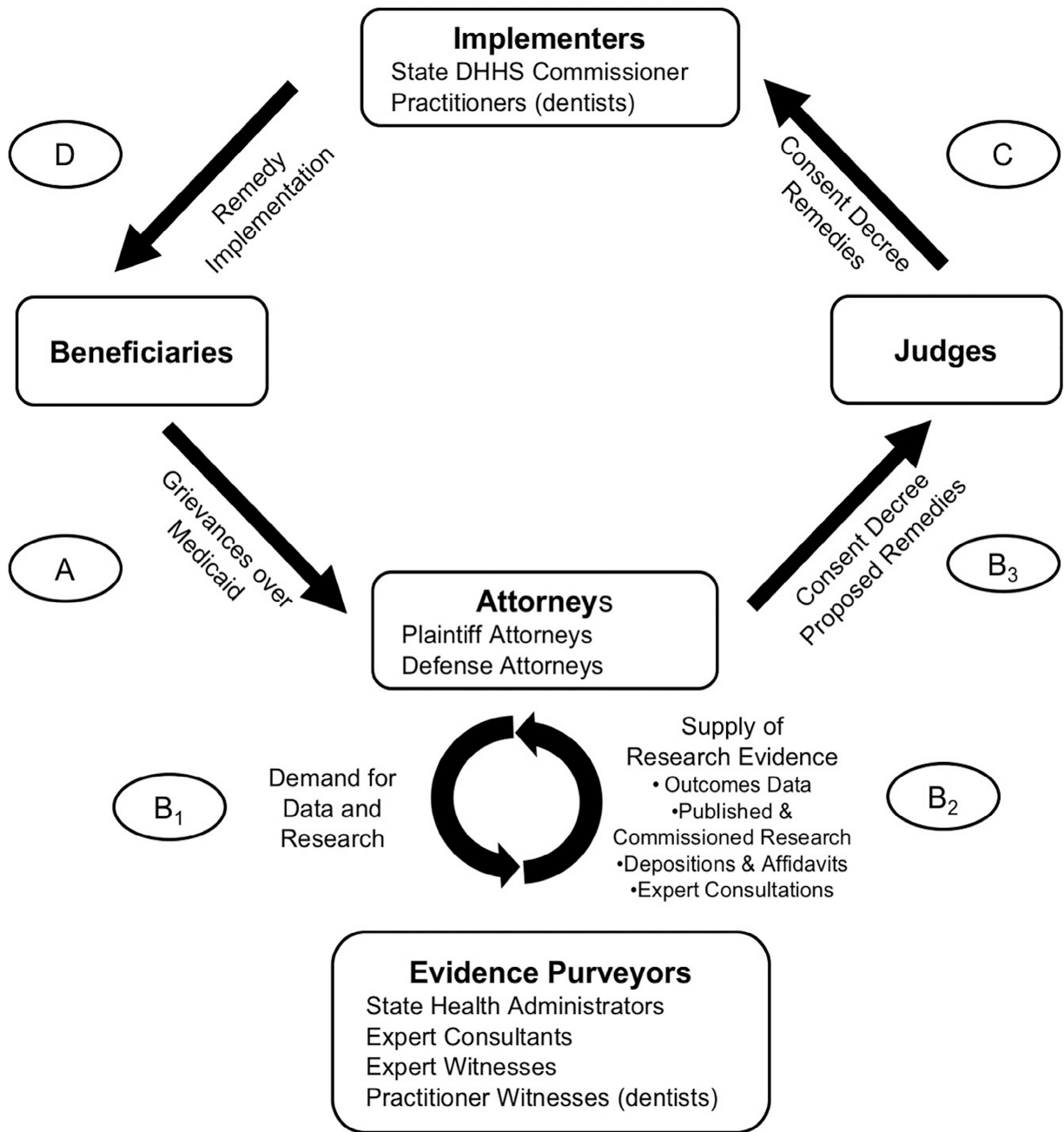


Figure 1. Relationship between actors and research evidence in *Frew* and *Hawkins* lawsuits.

Table 1

Procedural timeline of *Frew* and *Hawkins* lawsuits

Year	Procedural Action	Holdings	Year	Procedural Action	Holdings
1993	Complaint filed	Lawsuit filed on behalf of the class of Medicaid-enrolled children in Texas.	1999	Complaint filed	Lawsuit filed on behalf of the class of Medicaid-enrolled children in New Hampshire.
1995	Fairness hearing	Two day hearing on the lawsuit and proposed settlement.	2003	Consent decree hearing	Court heard arguments over the proposed settlement.
1996	Consent decree approved	Court found the class had standing and the consent decree fair and enforceable.	2004	Consent decree approved + order approving consent decree and motion to enforce settlement.	Court found the class had standing and the consent decree fair and enforceable.
1998	Motion to enforce consent decree.	Plaintiffs argued that the state had not carried out parts of the consent decree and asked the court to enforce the settlement.	2006	Court appointed mediator	Plaintiffs and defendants were in dispute over whether the NH DHHS was complying with the consent decree. The court appointed a mediator to address the dispute. Mediation was unsuccessful.
2000	Memorandum of opinion	Judge held that defendants violated parts of the consent decree and that the decree was enforceable.	2007	Order denying motion to enforce consent decree.	Plaintiffs filed motion to enforce the consent decree. Court ordered plaintiffs to file supplemental motion clarifying relief sought and put the NH DHHS on notice that grounds may exist to support contempt.
2003	5 th Circuit Court of Appeals reversed consent decree enforcement ruling.	Court ruled that the consent decree is in violation of 11 th Amendment.	2008	Order denying motion for contempt and for further relief.	Court concluded plaintiffs had not met the standard showing that the NH DHHS should be held in contempt for failing to comply with the consent decree.
2004	US Supreme Court reverses 5 th Circuit Court of Appeals decision	Court found the consent decree was enforceable.	2010	Order denying motion for contempt and motion to modify consent decree.	Court again concluded plaintiffs did not show why NH DHHS should be held in contempt and denied motion to extend consent decree for three years.
2007	Corrective action order signed	Court enforced original consent decree plus 11 modifications put forth by defendants.			
2013	Memorandum of opinion	Some corrective action orders from 2007 were satisfied but remaining orders and the consent decree remained in effect.			
2016	Case is ongoing				

Shaded area indicates period of analysis for study

Table 2Case Docket Documents for *Frew* and *Hawkins* Lawsuits Used in Archival Analyses

Case	Year Filed	Document Number ²¹	Description
Frew	1993	1	Original complaint
	1995	197	Transcript of fairness hearing before Judge
	1996	133	Order concerning fairness of consent decree
	1996	135	Consent decree
Hawkins	1999	1	Original complaint
	2003	1456	Transcript of proceedings for consent decree hearing
	2004	213	Order approving motion to enforce settlement, and granting motion to approve consent decree
	2004	214	Consent decree

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Table 3Descriptions and Roles of Actors in *Frew* and *Hawkins* Lawsuits

Actor	Description	Role
<i>Beneficiaries</i>	Medicaid-enrolled children and families in Texas and New Hampshire, referred to as plaintiffs or the class.	Initiated lawsuits, provided affidavits, depositions, and testimony on their experiences navigating Medicaid services.
<i>Attorneys</i>		Deposed witnesses, prepared information for review by opposing counsel, requested and collected research evidence, negotiated the consent decrees, and prioritized remedies.
Plaintiff Attorneys	Legal aid organizations in Texas and New Hampshire who represented the plaintiffs.	
Defense Attorneys	Texas and New Hampshire Attorney General Offices or the state's Legal Counsel in the HHS.	
<i>Evidence Purveyors</i>		Supplied attorneys with research evidence on state dental Medicaid programs by sharing dental utilization rates, surveying practitioners, providing recommendations on dental screening schedules, or using expertise in dental research.
State Health Administrators	State health administrators including state Medicaid Directors and dental Medicaid Directors.	
Practitioner Witnesses	Dentists and state dental association representatives.	
Expert Witnesses	Local academic researchers affiliated with public health programs and dental schools.	
Expert Consultants	Nationally recognized academic and legal health researchers.	
<i>Judges</i>	Federal judges who arbitrated the class action lawsuits in the Eastern District of Texas and New Hampshire District Courts.	Listened to the evidence presented in support of the consent decree, evaluated the remedies, arbitrated on the appropriateness and fairness of the consent decree, enforced the consent decree, and could hold the state in contempt if it failed to carry out terms of the consent decree.
<i>Implementers</i>		Implemented the consent decree remedies to broaden access for and treat Medicaid-enrolled children.
State HHS Commissioner	The Commissioner of the Texas Health and Human Services Commission or New Hampshire Department of Health and Human Services, referred to as the defendant.	
Practitioners	Dentists who would ultimately be responsible for providing care to children in Medicaid.	