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State “Technical Assistance Programs” for nursing home quality improvement: variations and potential implications

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Abstract

Context—To improve nursing home quality, many states developed “Technical Assistance Programs” that provide on-site consultation and training for nursing facility staff.

Methods—We conducted a national survey on these state programs to collect data on program design, operations, financing, and perceived effectiveness.

Results—As of 2010, 17 states have developed such programs. Compared to existing state nursing home quality regulations, these programs represent a collaborative, rather than enforcement-oriented, approach to quality. However, existing programs vary substantially in key structural features such as staffing patterns, funding levels, and relationship with state survey and certification agencies. Perceived effectiveness by program officials on quality was high, although few states have performed formal evaluations. Perceived barriers to program effectiveness included lack of appropriate staff and funding, among others.

Conclusion—State “Technical Assistance Programs” for nursing homes varies in program design and perceived effectiveness. Future comparative evaluations are needed to inform evidence-based quality initiatives.

Keywords

state regulations; technical assistance program; nursing home; quality improvement; long-term care

INTRODUCTION

Nursing home services are an important component of the U.S. healthcare system, covering about 1.4 million older and disabled Americans in over 15,000 nursing facilities (“Harrington C, Carrillo H, Blank BW, O’Brian T. 2010.”). Approximately half of them are

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85 years or older, and many are physically and/or cognitively disabled, and diagnosed with multiple chronic conditions(IOM, 2001). The annual cost of nursing home care was \$137 billion in 2009, six percent of the total national health expenditures(Martin, Lassman, Whittle, & Catlin, 2011).

The quality of care provided to nursing home residents, however, has been judged to be substandard(Institute of Medicine, 1986; Mendelson, 1974; Vladeck, 1980), and serious concerns about care problems have been expressed by the public, federal and state legislations, policymakers, and health professionals(GAO, 2002; *General Accounting Office*, 1998; *General Accounting Office*, 2003; IOM, 2001). Over the past several decades, both the federal and state governments have engaged in efforts to address these concerns. Major initiatives include the implementation of standard resident assessment and care planning tools(Mor, 2004), reforms of the federal and state regulatory process(Harrington, Mullan, & Carrillo, 2004), national and state public quality-reporting(Castle & Lowe, 2005), national quality improvement activities by Medicare Quality Improvement Organizations(Stevenson & Mor, 2009), national and state initiatives of pay for performance(Abt, 2006; Arling, Job, & Cooke, 2009; R. M. Werner, Tamara Konetzka, & Liang, 2010), and the development of “Technical Assistance Programs” (TAP) in many states aimed at providing collaborative on-site consultation, training or sharing of best-practices with nursing facility staff(White, et al., 2003).

Despite these varied efforts, many quality problems persist, suggesting the need to understand the strengths and weaknesses of each of these initiatives. Past and ongoing research focuses on the effectiveness of nursing home regulation(Li, et al, 2010; Shorr, Fought, & Ray, 1994), public reporting(Mukamel, et al, 2008; R. Werner, Stuart, & Polsky, 2010), Medicare QIOs(*General Accounting Office*, 2007; Rollow, et al., 2006), and the Medicare pay for performance demonstration(Abt, 2006). There is a notable lack of scientific evidence on the design of state-initiated TAPs and their potential to impact on nursing home care. This study describes the historical evolution of these programs and presents contemporary data on the design and operations of existing state Technical Assistance Programs. We conclude with a discussion of the implications of key program characteristics for nursing home quality improvement.

NURSING HOME REGULATIONS AND STATE TECHNICAL ASSISTANCE PROGRAMS

The nursing home industry has a long history of being subject to governmental regulations and enforcement to ensure quality(Winzelberg, 2003). Federal regulations have been in place since the enactment of Medicare and Medicaid in the mid 1960s, which set minimum standards that all nursing facilities eligible for federal funding have to meet(Winzelberg, 2003). In 1986, the Institute of Medicine (IOM)’s Committee on Nursing Home Regulation recommended strengthened federal regulations of nursing home care, reforms of oversight and enforcement mechanisms, and resident-centered quality assessments and service plans(Institute of Medicine, 1986). These recommendations resulted in congressional legislation of nursing home reform in the OBRA 1987, which, together with subsequent legislations, established new standards and rules of nursing home care(Capitman & Bishop, 2004).

The current system of nursing home regulations is largely under the purview of the OBRA 1987, featured by increased minimum staffing regulations, quality monitoring, and new sanctions such as civil monetary penalties (CMPs)(Harrington & Carrillo, 1999). These regulations and enforcements were fully implemented by the Health Care Financing Administration (currently the Centers for Medicare & Medicaid Services, CMS) in 1995.

Currently, federal law gives individual states the responsibility for monitoring facility's compliance with the federal standards, and allows states to set their own standards that exceed the federal standards. States are required to perform annual surveys of facilities to examine facility operations, review medical records and interview residents and staff. State surveyors issue deficiency citations if they determine that federal or state standards are not met by the facility. Standards and citations encompass all aspects of care, including clinical care, patient safety, quality of life, and resident rights.

Compared to federal regulations before OBRA 1987, one important characteristic of the current regulatory procedure is that state surveyors do not assume a role of providing technical assistance to nursing facilities in improving performance. Before OBRA 1987, federal law required state survey agencies to provide consultation to facilities and advise facilities on how to improve performance (Institute of Medicine, 1986). As a result, surveyors in many states served in both consulting and regulatory roles. The IOM's report in 1986 was highly critical of such dual responsibility, citing potential conflict between consultation and regulatory enforcement that "can lead surveyors to be too understanding and lenient toward substandard providers" (Institute of Medicine, 1986). The IOM believed that federal and state procedures for enforcement should be modified to reorient the program toward enforcement rather than consultation and to encourage states to adopt a stronger enforcement posture. This can be done by (1) separating the consultant and surveyor roles, ..., and (4) increasing both federal oversight and federal support of state enforcement activities" (Institute of Medicine, 1986).

These recommendations were adopted by Congress in 1987. Current federal protocol on state survey and certification explicitly states that surveyors "should not act as consultants to nursing homes..." (CMS program memorandum, Ref: S&C-03-08. December 12, 2002,) and that "...it is not the surveyor's responsibility to delve into the facility's policies and procedures to determine the root cause of the deficiency or to sift through various alternatives to suggest an acceptable remedy." (CMS, 2002; CMS, 2004,") In other words, current federal regulations emphasize strong enforcement of federal standards, and prohibit state surveyors from providing consultative advice to facilities.

Given the narrowed focus of current regulation system, and concerns about its ineffectiveness in ensuring better quality (*General Accounting Office*, 1998; *General Accounting Office*, 2003; IOM, 2001), many states initiated their own technical assistance programs (TAPs) that are designed to provide collaborative and on-site consultation (White, et al., 2003). These state TAPs represent a potentially important vehicle for states to meet facility needs for assistance in improving quality. These programs are consultative (or non-punitive), and, in some but not all states, results from the TAP visit are not reported to state survey agencies, unless serious violations are observed. It is expected that this collaborative approach can provide a positive stimulus to quality improvement, above and beyond the effect of the regulatory process. Until now, however, little empirical evidence exists to support this expectation.

EXISTING LITERATURE ON STATE TECHNICAL ASSISTANCE PROGRAMS

Although existing data on these state programs are scant, a pilot survey of 7 states' programs conducted by Abt Associates Inc in 2002 suggested that they differ substantially in program design, staffing patterns, connections with state survey agencies, and funding sources (White, et al., 2003). In the pilot survey, two state TAPs were totally independent of the state survey agency, and staffed by clinical professionals who had no working relationship with state surveyors. Staff in these 2 programs provided facilities with clinical practice guidelines or training to improve care practice (Rantz, et al., 2003; Rantz, et al., 2009; White, et al., 2003).

Programs in other states, however, were linked to the state survey agency. For example, staff in some programs worked inside the survey department, albeit as a separate team(White, et al., 2003).

Evidence is also thin regarding the effectiveness of these state TAPs on nursing home quality improvement. Our literature search found only two studies(Rantz, et al., 2001; Rantz, et al., 2009) that reported on the impact of the Missouri TAP, and found no study that has evaluated whether and how the varied program designs may impact on nursing home care differentially. The Missouri TAP consists of academic gerontological clinical nurse specialists (GCNS) who offer clinical consultations to nursing home staff(Rantz, et al., 2003). Focusing on better care practices and resident outcomes, the GCNS consultations included review and interpretation of Minimum Data Set (MDS) based quality indicators (QIs), identifying and resolving issues in current practice processes, review of best practice literature, and so forth. Before the full implementation of the state program, the state conducted an experimental study for program evaluation in sampled facilities in a one year period(Rantz, et al., 2001). Compared to facilities that did not receive consultation, facilities receiving GCNS consultations showed improvements in resident outcomes measured by several MDS QIs. These improvements, although moderate in a one year period, were encouraging and led to the statewide implementation of the program in 2001(Rantz, et al., 2003; Rantz, et al., 2009).

DESIGN AND METHODS

Survey of state technical assistance programs

We conducted a national in-depth survey of all state TAPs building on the previous 7-state survey. The current survey had two steps. First, a series of preliminary phone calls and emails were made to all states and the District of Columbia. The objectives of these preliminary contacts with each state were 1) to screen for states that have a TAP meeting our inclusion/exclusion criteria described below, and 2) for states with a TAP, to identify the appropriate state official to whom the survey should be administered.

In the second step, we conducted a structured, internet-based survey of identified state officials. The survey collected information about program design and activities, staff requirement and patterns, relationship with the state survey and certification agency, funding level and sources, and perceived program effectiveness. We piloted the survey with prior TAP directors from two states and revised the questionnaire based on their feedbacks. The formal survey was administered between October 2009 and April 2010. During the survey period, the survey group was available to answer phone calls or emails from surveyed officials when they need clarifications for survey questions. After we received the completed questionnaire from each respondent, the survey team checked it for accuracy and completeness, and made follow-up contacts with those whose returned questionnaire had missing or inaccurate information, in order to clarify or obtain additional data.

Defining state “Technical Assistance Programs”

According to previous reports(Edelman, 2001; Institute of Medicine, 1986; Rantz, et al., 2001; Rantz, et al., 2003; White, et al., 2003; Rantz, et al., 2009) we applied several defining characteristics of state TAPs to differentiate them from other nursing home initiatives:

1. The state program is collaborative and non-punitive: this criterion was used to determine whether the state has regular activities (such as on-site visit to facilities) for technical consultation rather than for other purposes such as certification, licensure, investigating complaints, and so forth.

2. The technical assistance is achieved through interactions between program staff and nursing home practitioners: we believed that the state program should be appropriately staffed by clinical, nursing or regulatory experts according to program objectives. In addition, state TAP staff should provide direct assistance to nursing home practitioners tailored to the need of the specific facility, in order to identify and resolve problems in care practices or regulatory compliance. This criterion was used to screen out other non-TAP approaches such as web-based dissemination of “best practices” or informal practitioner trainings that are beyond the scope of the TAP.
3. The program is funded in a sustainable way: states may have sporadic quality initiatives/efforts, such as formal and informal staff training, that do not receive continuous funding. Therefore, we define an additional inclusion criterion that to qualify for a state TAP, existing program must have received continuous funding.

Analyses

We present summary statistics on program characteristics using frequency and percentage for discrete responses and mean, median, and range (min-max) for continuous variables.

RESULTS

State officials in all 50 states and the District of Columbia responded to the first-stage survey. According to our definition, 16 states and the District of Columbia were identified as having nursing home TAPs as of 2010 (Figure 1). Most programs started between late 1990s and early 2000. In 2009, these states had 6,850 certified nursing homes (43.7% of the national total) with 695,977 certified beds (41.8% of the national total), and served 567,943 nursing home residents (40.8% of the national total)(Harrington C, et al. 2010). Fourteen of these states with TAPs responded to the second-stage survey on program details, resulting in a response rate of 82%.

Approaches for technical assistance

Among the 14 surveyed programs, only one (in Texas) mandated participation by all nursing homes in the state. Each of the 14 programs used multiple approaches to providing technical assistance. Figure 2 shows that these approaches included training during on-site visit to improve clinical practice (6 programs) or to improve compliance with federal and state regulations (6 programs); medical record review to identify quality issues (10 programs), review of facility practices to identify quality issues (10 programs); dissemination of evidence-based practice guidelines (8 programs) or sharing of ‘best practices’ from other facilities in the state (12 programs); informal provider training during facility visit (6 programs); and hot-line service to answer questions raised by the facility (8 programs). Programs in six states provided joint training to both nursing home staff and state surveyors, while other programs provided training only to nursing home staff.

Among all 14 programs, three had fixed schedules for on-site visit: the programs in Washington and the District of Columbia visited nursing homes at least quarterly, and the program in Maine had on-site visits at least twice a year; ten other programs did not have fixed schedules and usually visited nursing facilities only upon request by the facility; and the program in Texas visited nursing homes upon request by the facility, but could also have unannounced visits to facilities. A typical TAP-visit to the nursing home lasted from half a day to two days.

Compared to other state TAPs, the program in Texas was the only program that mandated participation by all nursing homes in the state, as a result of the Texas Long Term Care

Facility Quality Improvement Act (Senate Bill 1839) passed in 2001. The purpose of the program was to increase positive outcomes and to improve the quality of services for patients; recently the program identified 21 specific areas for improvement such as risk management for falls. Nursing homes may voluntarily request on-site technical assistance to address specific care issues they face, and program staff may have unannounced visits to facilities with problematic care (e.g., based on review of historic care deficiencies). All nursing homes in Texas are also required to participate in other forms of technical assistance such as dissemination of evidence-based practices and provider trainings.

Although legislatively mandated, the program in Texas was not designed to increase oversights on nursing facilities. Rather, the program intended to improve communications between providers and the state regulatory agency through collaboration and technical assistance. The legislation makes it explicit that the program is not a regulatory program and program staff is not visiting the facility to cite deficient practices. In addition, state officials will not enforce recommendations for quality improvement that might emerge from visits by program staff.

Program staffing

The most common staff type was nurses. Other common staff types included social workers, dietitians, program managers, and pharmacists. Staffing levels varied substantially across programs (Table 1), with total staff ranging from 0.63 FTEs (full time equivalents) in the smallest program to 56 FTEs in the largest program (mean 12.59 FTEs and median 4.50 FTEs). The average total staff FTEs per nursing home in the state was 0.07 and the average total staff FTEs per 100 nursing home bed in the state was 0.06. Program nurse FTEs showed similar pattern of variations. Programs in four states had a special requirement that TAP staff have received long-term care supervisor training (Maine), have past long-term care survey experience (Missouri), or both (Washington and Ohio).

Relationship with state survey and certification agencies

Table 1 also shows that in answering the question “How would you describe the working relationship between technical assistance staff and state surveyors?” 9 program officials believed that they were totally independent (i.e., have no direct contact with each other), 3 described them as somewhat independent (the TA group is somewhat related to the state survey agency – works within the agency for example – but is relatively independent of the survey team), and 2 believed they were working in close relationship (staff in the 2 programs work closely together; for example, they work in the same department and attend meetings together).

Nine out of the 14 programs had a policy that findings and data about nursing home quality collected by the TAP program are kept confidential and not shared with state surveyors. Among these 9 programs, 5 programs were identified as totally independent from state survey agencies, 2 programs (in Texas and Ohio) were identified as somewhat independent from their state survey agencies, and the remaining 2 programs (in Kansas and Nevada) were identified as having close relationships with state survey agencies. In both Kansas and Nevada, the directors of TAP programs directly reported to the directors of state survey and certification agencies (therefore, they were working ‘closely’ together), but the data of the TA visit to a nursing home would not be made available to the state surveyors of the specific nursing home. Finally, among the 5 programs that did not have a policy prohibiting data sharing with state surveyors, the working relationships between the TAP programs and state survey agencies were identified as ranging from “totally independent” to “in close relationship”.

Program funding

Program budget for the fiscal year 2008–2009 varied from \$82k to over \$1.4 million (mean=\$621,688, median=\$489,690; Table 1). The average program budget per nursing home in the state was \$3,187, and the average budget per nursing home bed in the state was \$26. Funding sources also varied substantially across states; the most common sources were state general revenue funds (5 programs), federal civil monetary penalties (3 programs), state civil monetary penalties (3 programs), nursing home licensure and tax fees (2 programs), and Medicaid funds (1 program). Six state programs received funding from one source, while other programs typically received funding from 3 or more sources.

Perceived effectiveness

The survey revealed that only 3 programs (in North Carolina, Missouri, and Ohio) had previously performed formal evaluations on program effectiveness. Two programs (in North Carolina and Missouri) had an ongoing evaluation with a plan for future program evaluations as well. In their previous evaluations, the programs in North Carolina and Ohio used feedbacks of nursing home staff to evaluate the effectiveness of on-site technical assistance, while the program in Missouri tracked the longitudinal changes of MDS-based QIs (Rantz, et al., 2009; Rantz, et al., 2001; Rantz, et al., 2003).

Although other states did not report formal program evaluations, they all have performed some informal evaluations which may serve as the basis of the self-perceived effectiveness of surveyed program officers (Table 2). For example, the program officials in Texas had informal effectiveness evaluations through both nursing home feedbacks and review of quality indicators and survey deficiencies to track change in targeted outcomes; while the program in Kansas, a voluntary program recently established (in 2010) to educate and assist Medicaid certified nursing facilities in the state with internal quality improvement efforts, measured effectiveness by growth in the number of participating facilities, utilization of resources and attendance at regional trainings, as well as trainee satisfaction.

Table 2 shows that twelve surveyed program officials agreed to strongly agreed that their programs had achieved stated program goal(s). States tended to set their program goals in different ways, with some making very general statements (such as to improve the quality of care and quality of life of nursing home residents) and others being more specific (such as to improve clinical outcomes in a set of identified areas). The majority of state TAPs aimed to improve clinical outcomes and safety (in general or in specific areas), to improve compliance with federal and state regulations, or to improve both. Other stated program goals that may accompany the goal of quality improvement included to facilitate case-mix reimbursement; to increase the accuracy of MDS assessment; and to help facilities address management and financial issues.

Despite these varied program goals, our survey revealed that 11 respondents agreed to strongly agreed that their programs were effective in improving nursing home quality (Table 2). However, perceived barriers to effectiveness existed. Commonly mentioned barriers included lack of appropriate staff (6 programs), lack of funding (4 programs), and the program's narrowed focus (3 programs). In addition, among the 13 voluntary TAPs, three programs officers identified the lack of mandatory participation for nursing homes as a barrier to program effectiveness. Of note, the program in Texas, the only mandatory program, tends to be otherwise similar to an average voluntary program – its staffing level was 0.05 total FTEs (and 0.03 nurse FTEs) per nursing home, data collected during a TA visit to the nursing home were not shared with state surveyors, and the TAP director did not report to the state survey agency director. The surveyed program officer from Texas “agreed” with the statements that the program achieved its goals and was effective in

improving quality, but identified the narrowed program focus and high nursing home staff turnover as potential barriers to program effectiveness.

DISCUSSION

This national survey suggested that as of 2010, 17 states have developed technical assistance programs to help improve nursing home care. Compared to existing nursing home quality regulations, these programs represent a collaborative approach to stimulating quality improvement. However, these programs vary substantially in key structures such as staffing patterns, and relationship with state survey and certification agencies. While they are perceived to be highly effective by surveyed officials, few states have actually performed formal evaluations. Perceived barriers to program effectiveness included lack of appropriate staff and funding, among others.

Understanding program variations

Several potential reasons may explain program variations. First, whether a state decides to institute a nursing home TAP may be related to the state's political philosophy. The choice could have been determined by factors such as perceived pressures about "over-regulation" of nursing home care or campaigning by consumer advocacy groups. The pilot survey of 7 state programs(White, et al., 2003) suggested that many stakeholders believed that the regulation of nursing home care, while clearly important, was not adequate to ensure higher quality and better resident outcomes. In a forum convened by the National Academy for State Health Policy and the Center for Medicare Advocacy in 2001(Edelman, 2001), many state regulators believed that given existing problems of the survey and certification process and the fact that most of the funding for nursing home care comes from the government, state government should exercise leadership to inform facilities of best practices. However, the fact that only one third of states have a program in existence suggests that states may have limited resources and funding to support such effort(White, et al., 2003). Among states that do have a program, their abilities to provide financial and staff supports may also vary.

Moreover, the choice between different types of program has been very much in debate. For example, state officials may support a TAP that is independent of the survey agency, given the belief that tying quality improvement activities to the enforcement procedure would conflict with the fundamental aim of the TAPs – to help facilities understand the principles and practice of quality care in a non-punitive atmosphere(Edelman, 2001; White, et al., 2003). They may also be concerned that blurring the boundaries of the 2 state programs would impede honest communication and information exchange between TAP staff and nursing home providers, and thus limit the effectiveness of the technical assistance approach(White, et al., 2003). Our finding that 9 out of 14 existing programs were totally independent of state survey agencies suggests that these concepts might be common among the majority of state officials. Nevertheless, 3 programs have developed close working relationship with their states' survey agencies, and their TAP directors directly report to the directors of state survey agencies. Surveyed officials of these programs cited the facts that their programs gave the state greater knowledge of facility operations in order to better monitor compliance, and was actually valued by nursing home providers as an opportunity to have open dialogues with TAP staff about compliance concerns.

Implications for nursing home quality improvement

These variations in state technical assistance approaches can have important implications for program effectiveness. However, to date evidence does not exist to support the benefit of one type of program over another, which may contribute primarily to the contrasting opinions held among state policy makers. Despite the contrasting program designs across

states, our survey found that most surveyed state officials believed that their programs had the ability to improve quality. However, there is a clear need to empirically evaluate the effectiveness of state TAPs, and to collect scientific data that can be used to determine which type of program is potentially more effective in quality improvement in the context of current federal/state regulation system.

Current state regulatory process for nursing home care represents a “deterrence” model of public regulation (Day & Klein, 1987), in which regulators are sanction-oriented. Walshe (Walshe, 2001) reviewed the literature on public regulations and suggested that, as summarized in Table 3, the deterrence regulation tended to be costly, could impact on quality more rapidly, but could also cause strained relationship between regulators and regulated organizations. On the other hand, the state TAPs (irrespective of program variations) are designed to be supportive and non-legalistic. Compared to the regulatory mandates, the TAPs may be less expensive because they do not require intensive inspections, and may improve quality in the longer term as a consequence of, for example, improving provider knowledge and practice (Table 3) (Reason, December 1997; Schein, 1999). However, they can also be easily circumvented by nursing facilities, especially when participation in the program is not mandatory.¹

Given these considerations, the state-initiated technical assistance programs, which are likely a product of the states’ political, social, and economic environment, should be able to supplement the function of the state oversight process. Moreover, it is expected that state TAPs with different designs will exert different effects on quality improvement. For example, programs that are better staffed and financed would be able to provide more assistance that is tailored to the specific need of a facility, and thus achieve a higher level of quality improvement. On the other hand, states facing budget limitations may choose to maintain a small program that covers only a small amount of facilities in the state (e.g., through voluntary participation by nursing homes) or provides technical assistance of limited scopes (White, et al., 2003). Our survey revealed that although the majority of program officials agreed that their programs “achieved stated goals” and “were effective in improving quality” (Table 2), surveyed officials in programs with lower funding were more likely to identify the lack of funding as a potential barrier to program effectiveness – the average program budgets per nursing home were \$2076 and \$3557, respectively, for programs whose surveyed officials reported this barrier and programs whose surveyed officials did not.

In addition, the working relationship of state TAPs with state regulatory authorities – and whether the TAP information is shared with state surveyors – may have direct impacts on program effectiveness. The literature on organizational management suggests that for a quality improvement (QI) program such as the state TAP to be effective, information gathered for QI purposes needs to be kept confidential so that clients (e.g., nursing home staff) are willing to disclose mistakes or problems of care without fear of retribution from the QI staff or from superiors internal to the client organization (Schein, 1999). Reason (Reason, December 1997) further recommends that the data collection, analyses and reports during the QI process should be separated from the supervising bodies that have authorities to institute disciplinary proceedings and sanctions. Reason argues that although the quality improvement effort focuses on learning to improve process of care, the

¹The only “mandatory” program in Texas does not require all nursing homes in the state to receive on-site technical assistance. Rather, it requires that only a subset of facilities identified as having problematic care receive unannounced visits and on-site consultations. However, none of these nursing homes are required to take the actions recommended by program officers during on-site consultations. Therefore, strictly speaking, the Texas TAP is still a voluntary program that differs essentially from the mandated quality inspections during annual survey and certification process. The implications of the unique design of the Texas TAP (versus other completely voluntary programs) are left to future research.

regulatory inspection aims at identifying noncompliance and imposing sanctions where applicable. As a result, clients under the regulatory system would be reluctant to reveal problems and have little to gain from doing so, while the same clients under the quality improvement environment would be collaborative to reveal and resolve care problems if doing so does not lead to sanctions(Reason, December 1997). Therefore, state TA programs that have no working relationship with state surveyors can guarantee the non-punitive nature of the program, and thus are expected to be more effective in informing and improving clinical care.

Moreover, the fundamental role and required expertise of state technical assistance staff are different from – and many a time conflict with – those of state surveyors(Reason, December 1997; Walshe, 2001). In general, the TAP staff need to understand human relationships and assume a motivating role to encourage facility cooperation, in addition to being experts of nursing home practices(Reason, December 1997). State surveyors, however, are trained to identify and penalize deficiencies in care, and, as required by legislation, need to be authoritative rather than consultative during this process(Walshe, 2001). Therefore, the conflicting roles assumed by a single TAP consultant would cause confusion and defensive responses of the client(Reason, December 1997; Schein, 1999) and make the program a less desirable source of technical consultation for nursing homes.

That said, caveats exist for state programs that focus on improving facility compliance with regulatory standards. First, keeping confidential the compliance issues identified during a TAP visit to the facility should help guarantee the non-punitive nature of the program and improve program effectiveness. However, for the sake of appropriate staff expertise, TAP staff with formal surveyor training or currently performing some surveyor functions would be more qualified than others to provide expert consultations related to federal and state regulations. Consequently, a TAP team that performs both consultant and surveyor tasks in the state offices may be a better, if not the only, choice for the state TAP to function as a reliable source of regulatory consultation for nursing homes. This would make it difficult to keep facilities' TA information undisclosed to the state regulatory authorities.

Limitations

This study has several limitations. First, for the states identified as having a TAP, we collected data on program details for the majority but not all states (overall response rate 82%). Second, this study surveyed identified TA officers to collect data on their programs. However, response bias may occur during survey procedures. Finally, we presented data on program characteristics and perceived effectiveness, but did not evaluate actual program effectiveness on nursing home practice and quality, or how varied program designs may lead to differential effects. These evaluative tasks would require the collection and analyses of longitudinal data on nursing home care, which seems to be beyond the scope of this study.

Conclusions

As of 2010, 17 states in the nation have developed collaborative technical assistance programs to help nursing homes improve their quality of care. Existing programs vary substantially in key designs such as relationship with state survey and certification agencies and staffing and funding levels, which may have important implications for program effectiveness. Comparative evaluations are needed to inform evidence-based quality improvement efforts.

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Figure 1.
States with nursing home technical assistance programs as of 2010

Figure 2.
Program activities to improve nursing home quality of care

Table 1

Key structural characteristics of state technical assistance programs (n=14)

	Number (%)	Mean (median)	Range (min-max)
Mandatory participation required	1 (7.1)		
Program staffing			
Total FTEs		12.59 (4.50)	0.63 – 56
Total FTEs per NH		0.07 (0.03)	0.001 – 0.23
Total FTEs per 100 NH bed		0.06 (0.03)	0.001 – 0.20
Nurse FTEs		7.86 (3.75)	0.29 – 35
Nurse FTEs per NH		0.04 (0.02)	0.001 – 0.16
Nurse FTEs per 100 NH bed		0.04 (0.02)	0.001 – 0.12
Relationship with state survey and certification agency			
Close	3 (21.4)		
Somewhat independent	2 (14.3)		
Total independent	9 (64.3)		
TA data are not shared with state surveyors	9 (64.3)		
Program director reports to the state survey and certification agency director	3 (21.4)		
Program budget for FY 2008–2009			
Total		\$621,688 (\$489,690)	\$82,000–\$1,471,380
Per NH		\$3,187 (\$783)	\$212 – \$13,158
Per NH bed		\$26 (\$7)	\$2 – \$92
Funding source			
General revenue funds	5 (35.7)		
Federal civil monetary penalties	3 (21.4)		
State civil monetary penalties	3 (21.4)		
Nursing home licensure and tax fees	2 (14.3)		
Medicaid funds	1 (7.1)		
Other federal or state funds	5 (35.7)		
Programs with only one funding source	6 (42.9)		

Table 2

Perceived program effectiveness and barriers

	Number (%)	Likert scale, number (%)				
		1 (strongly agree)	2	3 (agree)	4	5 (strongly disagree)
The program has achieved its stated goal(s)		7 (50.0)	2 (14.3)	3 (21.4)	2 (14.3)	0 (0.0)
The program is effective in improving the quality of care of all nursing homes in the state*		4 (28.6)	4 (28.6)	3 (21.4)	2 (14.3)	0 (0.0)
Are there barriers that limit program effectiveness? (answer=yes)	11 (78.6)					
Perceived barriers (N=11)						
Lack of appropriate staff	6 (54.5)					
Lack of funding	4 (36.4)					
The program's narrowed focus	3 (27.3)					
Participation is not mandatory	3 (27.3)					
Other	5 (45.5)					

* The answer for one program was missing.

Table 3

Comparisons between state nursing home regulation and technical assistance

	Regulation	Technical Assistance
Philosophy	deterrent	supportive
Cost	high	low
Impact on quality	rapid	longer-term
Response of nursing home staff	defensive	positive