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It was with tuberculosis that the extensive, systematic, and contested surveillance of disease began in the United States. This effort was triggered by the bacteriological revolution and informed by the juridical and ideological articulation of the state’s authority to intervene to protect the communal well-being. Although historians have typically, although not uniformly, been concerned about the more extraordinary measures that health officials might take—especially isolation and quarantine—it was not such liberty-limiting measures that were primarily at stake. At issue was who was responsible for monitoring and controlling the health of the patient—physician or health official? The often pitched battles between physicians and health officials would be cast in the language of paternalistic privacy.

FIRST FORAYS

A number of states and municipalities began to discuss the notification of tuberculosis (TB) in the early 1890s. Michigan passed legislation requiring TB reporting in 1893. The following year William Osler—the towering Johns Hopkins physician whose textbooks and curriculum marked a new direction in American medicine—strongly supported Philadelphia’s efforts to require name reporting for TB. The result was a bitter and contentious battle within the College of Physicians and Surgeons of Philadelphia, where a majority took great exception to the measure. As Dr. Frank Woodbury argued, “Registration would eventually divide physicians into two classes—those who reported their consumptive patients and those who did not. The physicians having the reputation of not reporting their cases would naturally have a larger clientele than others.” This would not only be patently unfair but would defeat the objective of reporting.
Others centered their opposition to surveillance on claims about its potential utility. Dr. James B. Walker, citing the example of typhoid, asserted that reporting had never lowered mortality. In his mind, it was with physicians themselves that the responsibility for the protection of the public health rightfully rested: “The physician,” he insisted, “is capable of doing all that the Board of Health can, without the manifold evils and annoyances of public registration.”6 But others doubted that much could be done to control the disease among the “poorer classes” because of the sheer scale of the problem, limited resources, and inadequate understanding of effective measures: “If it were possible by systematic notification for the Board of Health to locate a considerable number of these infected houses, what steps would it take to purify them? How would it deal with those of the poorer classes who are affected with this disease, and with the furniture, bedding and rooms?”7

Lawrence Flick, Philadelphia’s chief proponent of notification, suggested that the city’s leading medical men failed to understand the demographics of this disease: “I grant that it may be hard,” he argued, “for wealthy people to be recorded as suffering from tuberculosis, but this is a disease of the poor; the vast majority of consumptives are very poor, and the necessities of the poor so demand registration that it should outweigh the sensitiveness of the rich.” Responding to the sensitivities of the rich, he proposed to register only the houses of the infected rather than infected individuals themselves.8

For others, the opposition to reporting hinged on the continuing belief in a hereditary predisposition to the disease and in its lack of contagiousness.9 Fear and stigma would be the only result. Dr. Owen J. Wister imagined that notification “may lash the whole community into a panic” and create “a feeling of hostility” toward “the unfortunate victims,” encouraging their treatment “as criminals guilty of consumption.”10 Wister was joined by Dr. J. M. Da Costa, who asked, “Why fix the brand of leper on the poor unfortunate because he has consumption? . . . Why have him pursued from house to house, why have him a marked man?”11

Deep suspicions about the contagious nature of tuberculosis and its stigma carried the day in Philadelphia. The College of Physicians and Surgeons resolved that “the attempt to register consumptives and to treat them as the subjects of contagious disease would be adding hardship to the lives of these unfortunates, stamping them as outcasts of society. In view of the chronic character of the malady, it could not lead to any measures of real value not otherwise attainable.”12 It was a decision that protected the privacy of the poor but also denied them any resources that might have been provided by the health department. For better or worse, Philadelphia’s tubercular would have to rely on what physicians could offer. But if in Philadelphia paternalistic privacy worked to shield both the wealthy and the poor from the intrusions—benevolent or punitive, welcomed or opposed—
of health officials, in other locales it would allow the public health and medical communities to chart a very different course. In New York City, after a protracted controversy that revolved around the relative authority of private physicians and the department of health, municipal authorities embraced notification.

THE “JEALOUS” EYES OF MEDICINE

The prospect of TB reporting had been discussed in New York City as early as 1868. Stephen Smith put it simply: “When a Commissioner of Health from 1868 to 1875, I endeavored to have tuberculosis reported as contagious, but failed.” Efforts in 1889 likewise failed to bear fruit after the health commissioner wrote to “twenty-four of the most prominent and influential physicians of the city” to solicit their opinions about the “necessity” of reporting. The very few physicians who even bothered to reply to the health commissioner indicated that the medical professional would not offer “cordial support.”

It would take almost three decades from Smith’s 1868 effort before notification would be mandated. Although the climate of medical opinion had hardly become any warmer, the Board of Health was ready to wager on a new consensus regarding the danger and the imperative to act: “The communicability of pulmonary tuberculosis has been so thoroughly established . . . that the time has arrived when active steps should be taken looking towards its prevention in this city.” In 1893 Hermann M. Biggs—in his capacity as chief inspector of the Division of Pathology, Bacteriology, and Disinfection—recommended that public institutions be required to report the names of the infected. “It was not deemed wise, however, in the beginning, to make it obligatory for physicians to report cases, especially as it was comparatively easy to obtain reports from public institutions, which would give the most numerous classes of patients and those whom it was most important to instruct.” The Board of Health merely sent out a circular requesting private physicians and institutions to report cases of TB.

Although it was clear that the city planned to investigate cases and that reporting was intended as a means of allowing direct health department intervention, every effort was made to assuage the fears of physicians regarding encroachments upon their professional authority. Biggs thus stated that “this information will be solely for the use of the Department, and in no case will visits be made to such persons by the Inspectors of the Department, nor will the Department assume any sanitary surveillance of such patients, unless the person resides in a tenement-house, boarding-house or hotel, or unless the attending physician requests that an inspection of the premises be made.” Even then, “in no case where the person resides in” multifamily or multiperson residences “will any action be taken if the physi-
cian requests that no visits be made by Inspectors and is willing himself to deliver information circulars regarding the spread of TB and how to prevent its transmission.\textsuperscript{17}

In 1894 the department of health acceded to Biggs’s request for mandatory notification on the part of public institutions.\textsuperscript{18} The TB registry not only contained the name of the infected and tracked all changes in address but also recorded every public health action taken in the case until the patient’s death or recovery. Individual case records were only destroyed following a patient’s death.\textsuperscript{19} The \textit{Sun}, in New York, predicted that compulsory notification “will come later on. It is the only thing that remains to be done, to put the worst of all contagious diseases into the column where it properly belongs.”\textsuperscript{20}

The \textit{Sun} was prescient. In 1897 Biggs recommended and the Board adopted “more comprehensive and radical measures”: compulsory notification for all cases.\textsuperscript{21} Biggs’s full report regarding mandatory notification was reprinted in the \textit{Medical News}, which described it as “one of the most important reports it had ever received.”\textsuperscript{22} While the health department’s careful observation of the rights of private physicians and their patients garnered Biggs and the department some medical support regarding compulsory notification,\textsuperscript{23} the overall medical response was decidedly hostile.\textsuperscript{24} This was not, of course, a test case for notification. Systems of reporting were already in place for conditions like smallpox and typhoid. They had elicited no controversy. When reporting was extended to polio in the early decades of the twentieth century, it too would provoke no backlash from the medical community. Indeed, the medical community had expressed outright support for such reporting.\textsuperscript{25}

Tuberculosis—the “white plague”—was different. Mortality from tuberculosis began to decline in a continuous fashion in the United States in the 1860s and 1870s. Nonetheless, the “grim monster” remained the most significant scourge of progressive era America.\textsuperscript{26} The overall annual mortality rate from tuberculosis was, in 1900, approximately 200 per 100,000 in the white population. Among blacks, the rate was 400 per 100,000.\textsuperscript{27} Urban areas suffered the most. In New York City, for example, the overall mortality rate was 428 per 100,000 in 1870 and 256 per 100,000 in 1890. The New York City mortality rate varied from 49 per 100,000 on the Upper West Side to 776 per 100,000 in the tenement district of lower Manhattan.\textsuperscript{28}

Compounding this high death rate, TB was also chronic. Measures that had become standard for the control of epidemic infections—vaccination, isolation, and quarantine—would have marginal relevance in the instance of tuberculosis. New York City’s health commissioner, George Fowler, sought to assuage the medical community by stressing that his department had not declared tuberculosis to be a \textit{contagious} disease requiring immediate intervention, but “had [instead] declared it to be among the infectious and \textit{communicable} diseases, dangerous to the public health.”\textsuperscript{29} But this assur-
ance did little to comfort physicians, because there was no “clear-cut idea” about what these terms meant. To the extent that there was a general understanding that by “communicable,” the department meant that transmission required prolonged exposure to infection, some retorted that “there was high authority against the positive statement that tuberculosis was infectious and communicable.” In Philadelphia, where conflict over how the disease was spread also raged, Lawrence Flick felt certain that once the distinction was made clear, the feeling that TB surveillance represented “unnecessary espionage” would dissipate. But the classification of TB as a communicable disease was offensive even for those who felt no confusion because surveillance for this class of disease represented an extension of notification into new terrain.

Biggs would later comment, “I have always felt that much harm has been done by calling tuberculosis a contagious disease; it produces confusion in the minds of both the laity and the medical profession, because the conception of a contagious disease is always related to such diseases as scarlet fever, smallpox, etc., in which very limited contact or even simple proximity may result in their transmission. Every intelligent person knows that tuberculosis is different in nature from these diseases, and I believe that this distinction should be made and kept clear and definite. Tuberculosis is communicable, but not contagious.” It was precisely because the city had “always drawn a very sharp distinction between tuberculosis and the other infectious diseases which sanitary authorities ordinarily deal with” that notification was so threatening. It was unprecedented for the health department to require reporting when there was no clear course to prevent the spread of a disease. If the traditional interventions were unlikely to stem transmission and avert or contain an epidemic, some believed the health department should stay its hand. John Shaw Billings proclaimed, “If we knew of some way by which we could prevent the spread of pneumonia, the compulsory notification of such cases would be the first steps taken toward that end.” Given that health officials were not going to be able to approach TB as they did other contagious threats, how did they intend to act on case reports?

To the medical community, it seemed obvious that this was an effort to usurp physician authority over cases. Medical Record editor George Sh Brady, who had explicitly supported notification for conditions like typhoid and even advocated for small physician remuneration for such services, complained, “The compulsory step taken is a mistaken, untimely, irrational, and unwise one. . . . The real obnoxiousness of this amendment to the sanitary code is its offensively dictatorial and defiantly compulsory character. It places the Board in the rather equivocal position of dictating to the profession and of creating a suspicion of an extra bid for public applause by unduly magnifying the importance of its bacteriological department.” Already,
he continued, “The profession as a whole has watched with jealous eye the encroachments of the Board upon many of the previously well-recognized privileges of the medical attendant.”

Surveillance raised the question of who would be making decisions on behalf of the patient. As another clinical combatant explained, “If the sanitary code of the present city should become that of the greater city . . . the health board would be given practically the treatment of all infectious diseases, and it had only to declare a disease infectious in order to take charge of it.”

The medical community thus claimed, “There is no objection to the reports of pulmonary cases for statistical purposes” but objected stringently to “the extra missionary work assumed by the board which is the ominous and threatening quantity in the equation—the desire to assume official control of the cases after they have been reported, thus not only, by means of alarming bacteriological edicts, directly interfering with the physician in the diagnosis and treatment of the patient, but in the end, by creation of a public suspicion of his ignorance, possibly depriving him of one of the means of a legitimate livelihood.”

Thus the medical community insisted that reporting entail “no direct or indirect interference between patient and physician, either in the way of official inspections, bacteriological diagnosis, forced isolation, suggestions for treatment, or presumptuous instructions to the patient regarding hygienic precaution.” In fact, the Standing Committee on Hygiene of the Medical Society of the county of New York endorsed the reporting measure with only the proviso that lay at the heart of notions of paternalistic privacy: “Inspectors are forbidden to visit or have any communication with the patient without the consent of the attending physician, believing that the attending physician is capable of giving all the necessary instruction.” If health officials had no access to the patient, then the authority of physicians remained unchallenged, and they too could enjoy the “right to be let alone.”

Other medical groups remained hostile to any form of notification. The New York and Kings County Medical Societies had bills introduced into the state legislature that would have rescinded those portions of the New York City charter giving the health department its authority to deal with tuberculosis as a communicable disease. C.-E. A. Winslow, a notable public health figure and Biggs’s biographer, spun a dramatic tale about how, with considerable effort and negotiation by Biggs, who reportedly spent the winter in Albany during the legislature’s 1898 and 1899 sessions, the health department blocked passage of the bills.

Medical opposition, however, remained staunch. Even the New York Academy of Medicine—where Biggs had influential health department colleagues supportive of the initiative, including Drs. Edward G. Janeway, T. Mitchell Prudden, and William Park—rejected the idea of compulsory notification as “inexpedient and unwise,” causing the Medical Record to retort
to Biggs, “It would now appear that the time has come for the health board to rescind the obnoxious regulation, in order that it may, as formerly, work in harmony with the wishes of the profession.”

In the encounter with the medical community, Biggs underscored his conviction about the central and preeminent role the health department had to play in protecting the public health. It was an understanding that raised the question of who truly served the best interests of the patient and that stressed the ultimate subordination of the individual to the public good. Physicians, he asserted, objected to making TB a notifiable condition because they wished to protect patients from knowledge of their infection. Biggs rejected such misdirected benevolence: “How frequently have I heard patients complain most bitterly of their physicians, for not having informed them of the nature of their disease.” That fact aside, however, Biggs emphasized, “One of the fixed principles in the organization of society is that, if necessary, the welfare of the individual must be sacrificed to the welfare of the community.” This was not, therefore, a matter of who could best care for the individual patient; rather, it was about who could best decide for the community. Only the health department had the knowledge and perspective to make decisions for all.

Not all public health officials shared the enthusiasm of Hermann Biggs for tuberculosis surveillance. Some believed the tool that Biggs so forcefully promoted would, in fact, impose impediments on the effective response to tuberculosis and would rend relations between physicians and public health departments. Arthur R. Reynolds, Chicago’s commissioner of health, wrote, “I have never been able to convince myself that tuberculosis should be a notifiable disease. . . . The only object to be gained by notification would be to enable health officials to warn the sufferer of the danger in his sputum and to placard the house to warn off approaching visitors. It is my belief, based on practical experience with other contagious diseases, that these results may be better obtained through the voluntary cooperation of the profession.” TB notification, he continued, “had not only been a demonstrated failure, but the tactless efforts to enforce the provision had alienated a most valuable ally of any health department.” The notion of a partnership between physicians and public health officials would become the great, unrealized dream on the part of proponents of public health throughout the century.

In New York, even though state health officials were pleased with their unexpected success in introducing notification, they shied away from following the monitoring path charted by the city. The state’s health commissioner, for example, readily instituted free sputum testing and a system of lab-based reporting. Yet, he wondered, “after that, what shall be the next step for the State Department to undertake? In connection with the State government I do not think it would be justifiable to carry out such an elab-
orate system as that now practiced in New York city; it would perhaps partake too much of paternalism to be justified."

The battle over TB reporting, while primarily engaging only physicians and health officials, was not confined to the medical press. The public was well aware of the furious struggle. When they sought to rally the public, physicians invoked the specter of “government paternalism.” One physician wrote in the *New York Times*, “I think it can confidently be said that one of the horrors added to the dread of the ‘great white plague’ is fear of official registration, with its accompanying inspection and the resulting greater or less surveillance.” But although they warned the public of the dangers to their own liberty, physicians chose to emphasize that the health department was guilty of “robbing the physician of his legitimate work, and his bread and butter.”

But the mainstream press was unmoved. The *New York Times* charged physicians with “Crippling the Board of Health.” “Certain doctors,” noted the *Times*, “have drawn fanciful pictures of the invasion of the homes of their private patients by Health Inspectors; they have seen in fancy their earnings dwindle under the machinations of the board; they have prattled of espionage and grown almost tearful under the threatened horrors of paternalism, and altogether have worked themselves into an attitude of panic almost pitiful—if it were real.” The *Times* concluded, “Surely a department which requires from all simply a notification of the existence of each case of tuberculosis, but which deals officially only with those neglected by everybody else cannot be regarded as a serious menace to the rights of the laity or the emoluments of the medical profession.”

The extent to which “the more intelligent part of the population” embraced tuberculosis notification no doubt turned on the degree to which the health department had successfully convinced them that it would focus its efforts “among the more ignorant, and for the most part, foreign-born population,” where, to date, “the department has been powerless to interfere.”

**A FAR-REACHING PROGRAM**

In the 1890s, before the surveillance plan hit its full stride, George Fowler, the New York City health commissioner, sought to quell physician opposition. He addressed members of New York Medical Society and suggested that physicians had misinterpreted the new directive as compulsory inspection of suspected cases rather than compulsory notification. But it was clearly far more than mere notification. For Biggs, as for many other health officials, if surveillance was anything at all, it was a call to action. As John Fulton, his counterpart in Baltimore, explained, “A registration law merely for the accumulation of information would be a very feeble measure.” Indeed, in almost every instance in which health departments moved to TB
registration, the intent of state laws was to enable officials to monitor cases.\textsuperscript{58} A 1905–6 survey demonstrated that in most cities the purpose of the law was to allow public health investigations. Argued one locale: “The warfare must be waged in the individual case.”\textsuperscript{59} Thus, when New York City launched its tuberculosis reporting program in 1897, it made clear that its aim was to investigate cases and that reporting was intended as a means of allowing direct health department intervention.

The most dramatic measure that the department might take was compulsory isolation of the infected. But it was not the most important element of TB control.\textsuperscript{60} Health officials themselves expressed skepticism about linking surveillance to coercive measures. When state health officials endorsed TB surveillance, they explicitly rejected using it as the basis for isolation and quarantine, measures “which would excite such resentment.”\textsuperscript{61} When the president of the American Congress of Tuberculosis endorsed notification at an international conference, he warned against linking it to quarantine.\textsuperscript{62} But if the ambitions of departments of health were far less punitive, they were also grander. The surveillance system was intended as a far-reaching program of sanitary inspection and monitoring of all cases.\textsuperscript{63}

The city’s inspection plan amounted to a system of active surveillance in which health officials did not merely receive and catalog reports, but hired a team of investigators to seek out reports and keep information on patients up to date. In addition to collecting reports, the New York City health department also had the authority to inspect suspected cases of TB, typically reported by the laity, nurses, or charity organizations throughout the city.\textsuperscript{64} The city was divided into districts to which a nurse was assigned. Each had a TB clinic. Each day the nurse in charge visited her district clinic, collected the names of all new and discharged cases, and reported these names to the local borough health office by telephone. When she made this call, she would also receive the names of all newly reported cases in her district. The expectation was that the nurses would visit each newly reported case and conduct a monthly follow-up visit unless it was a report that came from a private physician. In this case she kept a record “for information only.” But this exception did not amount to a total absence of surveillance. Although the nurse would not actually contact the patients, she would visit the locality “to ascertain if there is a house at the address given, and its character—i.e., private, one family house, tenement, etc.”\textsuperscript{65} Although only minimal information—name, address, and diagnosis—was required in the initial physician report, elaborate patient records were created as a result of the monitoring process (figs. 8 through 11). The city’s TB registration card, for example, made clear that surveillance amounted to more than the creation of a record. It also required an inspection of the home. Nurses assessed aspects of both the patient’s and the family’s lives, including cleanliness, air space, sleeping space, patient income, expectoration arrangements, and nutrition.
Figure 8. A New York City tuberculosis registry form detailing the extent of information recorded on each case and household. This patient was visited five times in three months. John Shaw Billings, “The Registration and Sanitary Supervision of Pulmonary Tuberculosis in New York City,” *Department of Health of the City of New York Monograph Series* 1. New York, 1912. Courtesy of the New York Academy of Medicine.
This created not only a caring opportunity, but also a tutelary one, particularly in the case of immigrant families who were perceived to be in need of a kind of indoctrination into American standards of hygiene.

While New York City regulations formally required this extensive level of supervision, limited financial resources, in fact, drastically restricted the number of inspections that nurses could perform. There had been seven nurses on duty in Manhattan (sixteen on duty throughout New York City) in 1908—a number the department deemed “ridiculously inadequate.” In 1909 the budgets were slashed, and only eight nurses remained on duty in the entire city, meaning that they “could do but little more than make one visit to each new case reported.” In 1910, however, appropriations for communicable disease control increased dramatically. Eight new clinics were opened and one hundred fifty-five nurses employed. By 1912 there were twenty-one department clinics in Manhattan, two in the Bronx, six in Brooklyn, and one each in Queens and Richmond. While the percentage of TB cases under department supervision—patients being cared for in a city hospital or clinic and those monitored by visiting nurses within their homes—remained relatively stable over time, the number of home inspections almost quintupled in 1910, when nurses made nearly two hundred fifty thousand home visits.

Figure 11. A home nursing visit. National Library of Medicine.

[To view this image, refer to the print version of this title.]
By 1911 health officials had sufficient resources to observe the “cardinal point” of assessing all TB cases in the city once a month, “oftener if necessary.” After 1911 nurses from the sanitary inspection program made more frequent visits to a subset of cases, as the department began to focus on the noncompliant or recalcitrant TB patient. Such a focus was part of restructuring the TB program made, at least in part, in response to both “physicians and patients,” who objected to monthly visits as being “needlessly annoy[ing].” The city began to classify as “under periodic observation only” those cases in which the condition of the patient’s household was found to be satisfactory and adequate precautions for disease transmission were observed. Physicians were required to file a monthly report updating the health department on the address of such patients. These “at home” cases might receive a nursing visit only once every two months. In sharp contrast, in instances where public health nurses were not satisfied, cases were classified as being “under close sanitary supervision,” and patients were visited “every two or three days until the faulty conditions were corrected, or the case terminated by recovery, death or removal.” In 1912 the city required not only supervising nurses but also the attending physicians at all city clinics to call on the “very ill” and “delinquent . . . cases at their homes.”

Both the burdens and the benefits of such attention, then, accrued to only some members of the community. Indeed, that had been the intent from the outset. As early as 1904, it was clear that the health department was primarily concerned with preventing the spread of tuberculosis among the poor. The closest supervision and compulsory measures were enforced against the “homeless, friendless, dependent, dissipated and vicious consumptives” who were “most likely to be dangerous to the community.” These classes of individuals were not to be found among the English-speaking inhabitants of the slum districts, but among “the non-English-speaking inhabitants of the poorest tenement-house districts, recruited as they continually are by fresh supplies of the most filthy and ignorant classes from all parts of Europe.” But if, on the one hand, popular prejudices about the tubercular fueled sanitary surveillance efforts in New York City, the success of those efforts could also unravel insidious assumptions. Many years later, President Franklin Roosevelt’s secretary of labor, Frances Perkins, explained when she had been a tenement house inspector on the city’s Lower East Side, it was the “happy practice” of reformers to “console [themselves] with the thought that the residents of that district were entirely of Irish extraction, and the Irish . . . were the ‘seedbed’ of tuberculosis.” Yet the success of the public health campaign against the disease caused her to give up such a narrow conception of disease causation, bringing her and others “to the conclusion that it was something in the environment that had made it favorable for the growth of whatever seeds might be planted anywhere in the
human body,” and not something inherent in the peoples who succumbed to tuberculosis or any other disease.\textsuperscript{76}

The practice of surveillance did not necessarily work to change understandings of the links between class and race and disease. In southern locales, it was the black population that became the chief target of surveillance. Baltimore was one of the first major urban centers to require the compulsory notification of TB in 1896. As in New York, the focus of surveillance was on the poor residing in tenement-type dwellings unless private physicians provided a written exemption for their patients. For wealthy patients, the onus was on physicians to actually request sanitary supervision. Thus the two-tiered approach to TB control was more pronounced in Baltimore, where some classes and races could, by design, avoid notification altogether.

Because the percentage of cases reported by physicians was unimpressive, health officials advanced more expansive surveillance, which included enlisting whites in the surveillance of blacks.\textsuperscript{77} The effort involved a control campaign focused almost exclusively on African American homes.\textsuperscript{78} The interventions were shaped by prevailing beliefs regarding the inevitability of “black extinction”—TB was just one of the predictable consequences of emancipation.\textsuperscript{79}

In Jim Crow-era Atlanta, a containment campaign focused on “Negro servants,” washerwomen in particular, who were believed to represent the critical vector of infection from the poor black slums into the respectable white neighborhoods. Slavery, reasoned southern physicians, had had an ameliorating “quarantine effect” that was lost in the postbellum decades.\textsuperscript{80} Blurring any boundary between public health and law enforcement, the city merged the “criminal justice and public health objectives of registration” and attempted to erect a bimonthly system of physical examinations and health certifications for laundresses.\textsuperscript{81} Such efforts reinforced deeply held fears about emancipation and determination to maintain a color line. Just as significant, however, was the cross-class, cross-racial alliance of black servants and middle-class white women who depended on their services, which successfully resisted such harsh surveillance initiatives. Here, a broader kind of politics involving labor and its control framed the politics of privacy and surveillance.\textsuperscript{82}

In San Francisco, public health surveillance also involved questions of race, labor, and citizenship. Here it was the Chinese laundries that drew the attention of Board of Health members, who attempted to bring them under “sanitary surveillance” with the intention of closing them down altogether. Dr. H. Hart in particular sounded the alarm about the “loathsome” Chinese practice, which he claimed was pervasive among the “coolie” laundry workers, of spraying tubercular water from the mouth onto clothing in preparation for ironing. Although the “consumptive Chinese” and his “dangerous...
mouth spray” was the focus of this campaign, this practice was also linked to syphilis and infections of the skin.

In Los Angeles, government obligations to control tuberculosis were likewise racialized and, during the Depression era, dovetailed with repatriation efforts targeted at Mexicans and Filipinos. Yet the role of the state as a kind of purger or purifier did not mean that the TB control program lacked important care-giving aspects. The politics of exclusion, rather, gave those efforts a particular shape. Thus even when acting in their capacity as providers, municipal health authorities always premised the delivery of care on the economic potential of the immigrant and hence focused on “transforming as many patients as possible into productive workers.” Health officials sought to deport those beyond “transformation.”

**APPLYING “CONTINUOUS PRESSURE”**

After the turn of the century, New York City’s upheavals over TB reporting began to subside. Biggs would claim victory. “The experimental state of registration for tuberculosis is past,” he announced. “The practice has proved successful wherever tried.” Bearing him out, opinion in the medical press had softened. In 1903 the AMA, without making any direct mention of disease reporting, endorsed the collection of vital statistics, stressing the significance of timely death notification as one of the obligations of the modern practitioner. More predictably, the following year the Association of State and Territorial Health Officers (ASTHO) strongly endorsed name-based TB reporting. Practitioners in New York were likewise receptive. A writer in the *New York State Journal of Medicine* assured readers in 1904 that departmental procedure protected private patients from unwarranted intrusion and, indeed, reasoned that “the very fact [of] notification by the attending physician has the greatest educational value and justifies the assumption, in those instances in which the case is under the supervision of a private physician, that reasonable and necessary precautions for the protection of others will be taken.” In other words, notification signaled physician control of the case.

By 1910 the New York City Board of Health claimed that 90 percent of all TB cases were registered with the city. The free diagnosis of sputum—which required that the “name, address, age and sex of such person, and the name and address of the attending physician, accompany the specimens of sputa for record” if it was to be examined—was doubtless instrumental in the success of the system. Indeed, Biggs noted that while many physicians refused to report tuberculosis cases, they “would regularly send specimens of sputum for examination, with all the necessary data regarding the patient.” In response to New York’s success, a public health official in Baltimore would deduce that the roots of medical opposition “are not . . .
made fast, as physicians usually say, to the principle of medical confidence. If that were so, the free examination of sputa at public laboratories would have aroused the same opposition. . . . Medical opinion is . . . very sensitive, and may be easily be misguided by considerations of apparently trivial nature."  

The New York City Department of Health emphasized cooperation and downplayed the need for punitive measures designed to achieve physician compliance. “It is true,” wrote Biggs, “that the department of health has not endeavored to enforce strictly the regulations. It was not the intention to do so when they were enacted. It has not prosecuted physicians who have failed to report cases; the board is well aware of the fact that large numbers of cases are not reported; but still a constant advance is being made.” In sharp contrast, in Boston, prosecuting physicians seemed to increase tuberculosis reporting: in 1910 physicians failed to report some 328 cases of tuberculosis, as determined by an examination of death certifications, but by 1911, following a prosecutorial campaign, the department of health found only 63 unreported cases and only 14 in 1912.  

Despite the less aggressive posture taken by New York City officials, the health department did not simply rely on the goodwill of physicians; it took decided steps to ensure that physicians reported cases and then kept the department updated on the progress of those patients. In 1907 the department began sending out an annual letter to the attending physician of each “‘private’ case,” requesting “information as to the outcome of the case.” If the physician failed to reply, “the original address of the case is visited by a Department Inspector.” If the individual was found, the case was brought “under the supervision of the department.” In short, if reporting signaled physician control of a case, the failure to keep the department informed about the condition of that case represented delinquency.  

To pressure physicians to initiate reporting, the department of health systematically compared the TB and death registries. When TB was noted as a cause of death but the case had not been reported, the responsible physician’s name would be placed on a blacklist. The department would then send letters to physicians reminding them of the requirements of the sanitary code and asking “for an explanation for the failure to report the case.” Biggs remarked, “A second letter has been rarely required.” Indeed, from 1894 to 1907 physicians were fined anywhere from $50 to $200 in only about six instances. The aim was to apply “continuous pressure . . . on all sides to secure increased accuracy in the reports.” This system of using death certificates to monitor physician reporting continued until at least 1918.  

Department of health TB inspectors—who received reports of “suspected cases” from landlords, charity organizations, dispensaries, and even private citizens who filed complaints—also served as a double check on
physicians. If while on a routine visit or in response to a report of a suspected case, an inspector made a diagnosis of TB and was told that that a physician had attended the case, the inspector would visit the physician, inquire as to why the case had not been reported, and then assure that it was entered into the city’s registry. John Shaw Billings, the physician who managed the city’s TB registry, thus described the department as having achieved “excellent control over [physicians].”

Nonetheless, health department officials complained that even physicians who reported cases and who requested that their patients not be visited by any health department personnel failed to exercise adequate supervision over their patients. A department study conducted in 1918 found that 80 percent of 70 physicians in the city’s Chelsea district were unable to report any information regarding the home conditions of and behavioral precautions taken by their TB patients, such as use of separate plates and separate bedrooms. The department concluded, “Without infringing upon rights or prerogatives of private physicians in control of their cases, we should require them to render an accounting at stated intervals with respect to home conditions observed by them, so that we may be assured that there is no relaxation in measures for prevention of the spread of tuberculosis.”

Other locales that experienced similar physician inattention to the living conditions of the poor would also require that physicians record data that went far beyond name, address, and diagnosis. For example, in Maryland the initial case report included information about the patient’s occupation, work capacity, and earning power as indicators of his or her economic condition. In addition to data about the size and habits of the family (for example, Does the patient “habitually kiss other persons on the mouth?” share tableware and napkins? spit on the floor?), records also required information on the condition of the patient’s habitat, covering size of dwelling, the degree to which it was tidied, and number of beds per occupant, which reflected on the practice of bed sharing. But if, in Maryland, the initial case report required considerable detail, it was far surpassed by the information ultimately recorded by New York City health inspectors.

THE PLACE OF PRIVACY

As it sought to consolidate its program of tuberculosis notification, the New York City health department placed great emphasis on the confidentiality of the registry it was creating. Health officials framed notification in terms of the “rights of both physicians and patients,” with physicians receiving priority. Concern for confidentiality had multiple sources. First, the city health department, like others, feared that if it did not protect records, physicians would intensify their opposition to reporting. But it was also widely understood, especially in the context of both tuberculosis and venereal diseases.
real disease, that a failure to protect records could injure patients. In the instance of tuberculosis, a visit from a city health inspector could result in loss of housing if a landlord suspected the condition. Recognizing this risk, the city’s department of health stipulated that “in tracing cases on first visit or, if unable to obtain admission, when making a revisit, no messages are left with neighbors. The reason for the nurse’s visit (i.e., that there is a consumptive on the premises) is only to be given to the family.” Patients were admonished to carefully guard knowledge of their condition: “Do not talk to anyone about your disease, except your physician,” the department warned patients in its standard, widely distributed informational circular published in a number of languages and given to all patients registered with TB. In invoking privacy, the department of health reconfirmed and reinforced the medical guardianship of patients.

With regard to its central records, officials clearly stated from the very outset that the registry was intended “solely for the use of the department.” Indeed Biggs made plain that reporting to the health department did not involve “notification to the community at large.” Echoing this position, New York State in 1913 enacted legislation specifying that the TB registry “shall not be open to inspection by any person other than the health authorities of the State and of the said city, town, or village; and said health authorities shall not permit any such report or record to be divulged so as to disclose the identity of the person to whom it relates, except as may be authorized in the sanitary code.”

In Maryland, where TB surveillance was so shaped by racial politics, it was not unusual for physicians to inquire with the registry about whether a case had been previously reported by a colleague. But even here, health officials felt impelled to say that “privacy is secured in express and unequivocal terms.” Physicians who thus tried to solicit information from health officials were informed that officials “are forbidden to divulge information of this sort. . . . The physician realizes in a moment the impropriety of his inquiry, and sees that the confidential character implied by the terms of the law is secured in its practical operation.” While placarding tenements or hotels to indicate the presence of an acute infectious disease like cholera or polio was common practice throughout the United States, in the instance of TB, placarding occurred only when rooms once occupied by a patient with tuberculosis who had died or left the premises were not properly disinfected by landlords. Placards read: “NOTICE: Consumption is a communicable disease. This apartment has been occupied by a consumptive and may have become infected. It must not be occupied by persons other than those now residing here until an order of the Board of Health, directing that the apartment being cleansed and renovated, has been complied with.” A placard listed the name of the former tenant and indicated which apartment he or she had occupied. Plac-
ards could not be removed until compliance with department renovation orders. Sanitary policemen ensured that the warnings remained in place.117

THE INFORMAL STATE

Health department activities were complemented by those inspired by charitable callings. During the period of progressive era TB control, charity societies—groups interested in mother and child health and welfare in particular—formed around the cause of identifying and aiding crippled children, up to 90 percent of whom were tubercular.118 New York City’s Association for the Aid of Crippled Children represented a group of upper-class women who, beginning in 1907, raised funds to transport children suffering primarily from tuberculosis of the bone to public schools so that they might become “self-supporting useful men and women.”119 The Federation of Associations for Cripples—organized by the wife of a prominent New York City surgeon and the wives of local businessmen—sought to create a registry of such children in order “to form a basis for an accurate working knowledge of the extent of the cripple problem and to discover how adequately existing agencies are dealing with the question of proper care and physical care and education for cripples.”120 As with other charity organizations in the United States, the key to initiating such “community action” was “fact-finding.”121

Shelby Harrison, a prominent progressive era social worker, argued that the collection and distribution of information related to social problems was “a means to better democracy by informing the community upon community matters,” which “provided a basis for intelligent public opinion.”122 It was part of a larger, oft-expressed desire for greater individual and community participation in democracy through decentralization.123 Indeed, the movement grew out of the progressive tradition of social reform, particularly after the turn of the century, when commission governments and initiative and referendum movements sought to ensure, in Teddy Roosevelt’s words, “the right of the people to rule.”124 TB, within this framework, was the great “social disease” that demanded a “new social conscience” and a powerful civic movement that went beyond the efforts of health officials and physicians to ensure its eradication.125 The public sentiment was “We need to establish a small antituberculosis society in every social, fraternal, and business organization which can be reached.”126

While the charity movement extended beyond the state, it was, at the same time, viewed as part of public health activities directed by the state. In its extensive 1912 report, The Registration and Sanitary Supervision of Pulmonary Tuberculosis, the New York City Department of Health included a diagram that illustrated the organizational approach to TB control (fig. 12). The department itself was, of course, the hub of this effort. While not
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directly linked to its activities, the broad range of charitable organizations was clearly viewed as a vital part of the landscape of TB control. Indeed, the health department referred nearly three thousand patients to charity organizations between 1908 and 1911, and these organizations, in turn, reported “suspected” cases to health officials.127

The New York Charity Organization Society, for example, worked almost hand in hand with the health department and were ardent advocates for client adherence to its hygienic, nutrition, and household maintenance recommendations. The society provided prescriptive health standards and material relief, such as food, fuel, towels, and bedding. It could use the withdrawal of relief or the threat of health department compulsion to assure

Figure 12. The organization of the New York City tuberculosis program. While the health department shows no direct links to the charitable organizations, they are seen in the far left-hand corner. These organizations were clearly viewed as part of the network and as part of the working relationships of the department. John Shaw Billings, “The Registration and Sanitary Supervision of Pulmonary Tuberculosis in New York City,” Department of Health of the City of New York Monograph Series 1 (New York, 1912).
compliance. And, like the department of health’s nursing corps, charity workers conducted their own, sometimes unannounced, household inspections. As a consequence of these kinds of interactions, community-based initiatives often ended up leading to the creation of state bureaucracies as the efforts of local reformers became institutionalized within state agencies. This held true not only for TB but also for a number of reform efforts.

But whatever the organizational consequences, the intent, as one social theorist described it, was to transform the “private into public” by extending the realm of community life. The purpose of documenting the extent of social problems like childhood tuberculosis was to “draw in the general public” and establish opportunities for consistent interaction between the needy and the educated or affluent, which motivated local initiatives such as the “friendly visit.”

The quest for community participation in and control of social problems did not mean, however, that registries of the needy were a matter for the public record. Charity organizations relied on case histories to appeal and galvanize the community through newspaper human interest stories and articles in popular and professional journals. But “identifying data” was always removed, and agency records remained “carefully guarded.”

Observation of strict norms of confidentiality did not, however, represent a bar to the sharing of information among the fold of citizens’ organizations that were recognized within a local community. In Boston, for example, charities exchanged their information freely. Reformers established a central registry of families—known as a central social service exchange or “confidential exchange”—so that different agencies might determine what relief a family had received. In this way various agencies both avoided duplication of effort and connected individuals or families to the network of services more effectively.

Not all communities had a formal confidential exchange, but the clear expectation was that information might be shared. There was also a mutual understanding of the rules of sharing that was guided by notions of paternalistic privacy. Just as the clinician’s authority over the patient demanded respect, the interests of the “parent” charity organization, which acted as the guardian or steward of the child or family, had to be acknowledged. Thus the reformers who undertook the census of New York City cripples in 1914 assured the organizations whose data they sought that “we will take no action in regard to any case which you refer to us without your consent.”

The Association for the Improvement of the Condition of the Poor, at least, was more than happy to oblige, responding, “We can surely give you the names, ages and addresses of all cripples now under our care in tenement families.” The New York Charity Society opened its records to public schools, the police, the courts, newspapers, as well as employment bureaus and city agencies.
TB SURVEILLANCE TAKES HOLD

The New York City experience blazed a path for the extension of reporting in other major cities. The city had always been the public health vanguard for the nation. “The eyes of the world,” observed prominent social reformer Florence J. Harriman in 1912, “are upon New York” and its notification program. Just as the city’s careful documentation of its conquest of infectious disease shaped social, health, and urban policy in cities and states, the nation would look to the experience of New York City in extending surveillance to tuberculosis.

As of 1901 only 8 of America’s larger cities mandated TB reporting. By 1906 53 of the 86 cities with populations of 48,000 or more had adopted such requirements. Of the 20 largest cities—comprising a population of almost 11 million—all but 4 had mandatory reporting. By 1921 50 cities had developed visitation plans for TB cases that were modeled on New York’s extensive surveillance and monitoring protocol.

In contrast, at the turn of the twentieth century, 32 states and the District of Columbia did not explicitly require any tuberculosis reporting. But by the second decade of the twentieth century, following the recommendations outlined in a “Model State Law for Morbidity Reports” by ASTHO in 1913, a number of states had moved to make physician reporting of TB mandatory, with 38 states requiring reporting by 1919.

Although some officials declared reporting to be a disaster from the perspective of actual public health benefit and physician relations, others were more optimistic, particularly in the early years of the enterprise. Pennsylvania, which instituted morbidity reporting in 1905 for a number of conditions including tuberculosis, found physicians quite compliant with reporting requirements: “It has not yet been found necessary to proceed against any physicians for not reporting.” Vermont had some 10,000 physicians who made 75,329 reports for infectious disease the first year the law went into effect. Laboratory reporting played a central role in the extension of TB surveillance, in some instances as a prelude to mandatory notification by doctors, in others as a supplement to physician reporting. But of course, for laboratory-based reporting to be successful, physicians had to know about free lab services. “Our laboratory facilities have been advertised all over the State in the newspapers and by means of circulars,” reported Dr. J. N. Hurty of Indianapolis, “yet we occasionally receive letters asking us why we have no laboratory. Evidently some people in Indiana read very little.”

As they were extended, tuberculosis reporting requirements were, with a few exceptions, almost universally imposed on physicians alone. The communicable disease law in Vallejo, California—in language reminiscent of nineteenth-century sanitary codes—required both physicians and owners
or managers of boarding houses, hotels, lodging houses, and tenements to report all “contagious diseases,” including pulmonary tuberculosis. Likewise in Utah, where many with tuberculosis went in search of a healing climate, the law explicitly required the owners and proprietors of hotels and boarding and lodging houses to report tuberculosis. Colorado, too, dealt with “a good deal of imported tuberculosis.” Its effort to impose reporting requirements on the laity faced resistance. Dr. Henry Sewall noted, “Public sentiment . . . is not with me in [Denver], and that is true of many other towns that I know anything about.”

Even so, health officials would hold fast to the belief that “propositions to register the tuberculous in any community may expect opposition from one source, and only one, namely, the medical profession. If lay opposition arises, one can almost always trace it to a medical source.” And indeed it was most often physicians who entered the fray with health officials. Thus as tuberculosis reporting advanced, the concerns of private practitioners echoed those that had first been raised in the Northeast. William Baldwin, chair of the National Association for the Study and Prevention of Tuberculosis, noted that doctors resisted filing these reports “on the ground that they interfered with the confidential relations of patient and physician; that they would be made public, and so cause patients to leave physicians who made such reports and go to those who refused to make them; that such patients would be injured in various ways by allowing others to know they had tuberculosis; and that a stigma would also be placed on the family in which the disease existed.” In only three cities that had compulsory notification were the records “open to the public.”

ELUDING THE SEARCHING EYES OF THE STATE

During the opening battles over TB surveillance, Herman Biggs proclaimed his certainty that “the belief is never aroused in any class of the population, however ignorant, that the institution or enforcement of any sanitary measure is designed for the restriction of individual freedom.” But if some patients welcomed public health attention, there is some evidence, albeit scant, that others tried to elude sanitary supervision. Health officials were well aware, for example, that patient “attempts to influence the statements on the death certificates are therefore common.” “Direct bribes are offered, and the remark, ‘Well, doctor, if I don’t get the insurance I cannot pay your
bill, may well be considered a forcible stimulus to some physicians to seek for other causes of death.”

When a name was reported, patients could still fairly readily escape the net of surveillance. In New York City, nearly seven thousand cases could not be found at their reported addresses in 1911. Some gave a false address. Others might provide the correct address but then move immediately upon discharge from a hospital. Even cases identified and visited might suddenly disappear without a trace. Given the extraordinary level of supervision that both the city and charity organizations exercised, it is perhaps not surprising that, while there was no organized public protest surround TB reporting, patients intentionally misreported their addresses as frequently as “the clerk records the address incorrectly.”

Working-class immigrants made frequent moves, regardless of whether they wanted to escape health inspectors, and it was these patterns of migration that made surveillance all the more difficult. When a breadwinner suffered from a chronic, debilitating disease, the moves were undoubtedly downward. And tuberculosis was the paradigmatic disease associated with immigrants and economic devastation. For Rose Cohen, who arrived in New York City with her aunt in 1892, the pattern of moving was tied to shifts in economic fortune and contributed to her own illness. They first lived with Rose’s father in one room of a three-room tenement with another family of five. Her aunt shortly left to live with another family as a domestic servant. Rose and her father moved to Broome Street in 1893, where they were joined in their two rooms by her mother and four siblings. They paid $7.00 per month in rent. The depression of 1893, however, soon forced the family of seven to move back to Cherry Street when both Rose and her father lost their jobs as fellers, sewing the lining of men’s coat sleeves. Three lodgers joined them in a three-room tenement. Rose moved out in 1894 to work as a domestic servant, leaving only nine living on Cherry Street. She lived in the family’s kitchen. Before the end of 1894, her father was once again employed and the family moved to Clinton Street. The cycle of change was reflected in Rose’s health. Tuberculosis became a “long, drawn-out affair. It had no definite beginning and promised to have no end.” It was not visits from health officials or charity workers that Rose dreaded but rather hospitalization.

The TB program was aimed at halting the downward spiral and forestalling or preventing hospitalization. But there can also be no doubt that as the disease progressed, it became more and more difficult to meet the behavioral and sanitary expectations of the health department—which included basic criteria for proper nutrition, personal hygiene, adequate clothing, intimate relations, ventilation, expectorating and disposing of sputum, and sweeping and dusting the home—and the hand of the health department might feel heavy indeed.
It remains clear, however, that no matter how extensive sanitary supervision had become, many escaped the embrace of the state, by accident or intent, exposing the flaws and limitations that would plague case reporting even as it became a central feature of public health practice in the twentieth century.