

# Northumbria Research Link

Citation: Murphy, Neil (2022) Plague Hospitals, Poverty and the Provision of Medical Care in France, c. 1450–c.1650. *Journal of Social History*, 55 (4). pp. 825-853. ISSN 0022-4529

Published by: Oxford University Press

URL: <https://doi.org/10.1093/jsh/shab066> <<https://doi.org/10.1093/jsh/shab066>>

This version was downloaded from Northumbria Research Link:  
<http://nrl.northumbria.ac.uk/id/eprint/47710/>

Northumbria University has developed Northumbria Research Link (NRL) to enable users to access the University's research output. Copyright © and moral rights for items on NRL are retained by the individual author(s) and/or other copyright owners. Single copies of full items can be reproduced, displayed or performed, and given to third parties in any format or medium for personal research or study, educational, or not-for-profit purposes without prior permission or charge, provided the authors, title and full bibliographic details are given, as well as a hyperlink and/or URL to the original metadata page. The content must not be changed in any way. Full items must not be sold commercially in any format or medium without formal permission of the copyright holder. The full policy is available online: <http://nrl.northumbria.ac.uk/policies.html>

This document may differ from the final, published version of the research and has been made available online in accordance with publisher policies. To read and/or cite from the published version of the research, please visit the publisher's website (a subscription may be required.)

## Plague Hospitals, Poverty and the Provision of Medical Care in France, c.1450–c.1650

### Abstract

*This article examines the expansion of plague hospitals in early modern France. It shows that the development of these institutions was an urban initiative and that there was only limited involvement from the crown before the mid-seventeenth century. While there is a typically highly negative view of French plague hospitals, with these institutions being seen as death traps where the infected were simply sent to die, they played a vital role in providing the poor with access to specialist care. Plague hospitals were staffed by physicians, surgeons, nurses, and apothecaries, who provided a range of important medical treatments to the infected. Municipal governments developed these specialist hospitals for the plague sick—and only the plague sick—and sought to provide them with the type of environment early modern medical experts believed to be the most conducive for healing. The article situates the development of these hospitals within the wider context of health care provision in early modern France. Overall, it shows that the development of plague hospitals was a key manifestation of the drive toward providing professional medical care to the poor.*

Between the mid-fourteenth and mid-seventeenth centuries, France was struck repeatedly by waves of plague.<sup>1</sup> While some important steps toward trying to control the disease were developed in the mid-fourteenth century (including the introduction of quarantine and measures to limit the movements of the poor), these efforts were short-lived and it was not until the mid-fifteenth century, as France emerged from over a century of warfare with England, that we find the emergence of kingdom-wide systematic responses to combating the disease. These measures were principally a result of urban initiatives with only limited involvement from the crown before the mid-seventeenth century. In particular, from the mid-fifteenth century, municipal councils across France devised and implemented sophisticated and wide-ranging measures to try and prevent the spread of plague, including the development of dedicated hospitals where the infected were separated from the healthy and those with other ailments and provided with specialist medical care.

*Journal of Social History* vol. 55 no. 4 (2022), pp. 825–853

doi:10.1093/jsh/shab066

© The Author(s) 2021. Published by Oxford University Press.

This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<https://creativecommons.org/licenses/by/4.0/>), which permits unrestricted reuse, distribution, and reproduction in any medium, provided the original work is properly cited.

While these hospitals played a central role in the war against the plague in early modern France, they have been largely overlooked in the extensive work on both plague and the social history of medicine. Jean Noël Biraben, in his *Les hommes et la peste*, which remains the key study of plague in early modern France, only briefly discusses pest houses.<sup>2</sup> Moreover, Biraben, like other plague historians of his generation, had a whiggish understanding of medical progress and took a dismissive view of early modern efforts to control the disease and treat the sick.<sup>3</sup> Although recent years have seen the rehabilitation of the reputation of Italian plague hospitals, particularly through the work of Jane Crawshaw Stevens, little specific research has been done on these institutions in France, where the standard view remains highly negative.<sup>4</sup> This bleak assessment of French plague hospitals forms an element in the wider pessimistic understanding of hospital medical provision in pre-Revolutionary France, a view which Colin Jones has termed the “Black Legend” of French hospitals.<sup>5</sup> Michel Foucault was one of the earliest and most influential proponents of this gloomy appraisal of early modern French hospitals, institutions which he argued were principally concerned with offering shelter to the poor rather than with providing medical treatments.<sup>6</sup>

This “big bang” view of the origins of the modern French hospital has been successfully overturned. Recent studies by John Henderson and Samuel Cohn on medical provision in Renaissance Italy have demonstrated clearly that pre-modern hospitals offered both specialized and professional medical care, and were far from the Foucauldian death traps they are often portrayed as.<sup>7</sup> Many of the earliest challenges to Foucault’s narrative emerged directly in response to medical provision in early modern France, initially in the mid-1980s by Colin Jones (and developed further in following years) and most recently by Tim McHugh in his work on seventeenth-century French hospitals. Both Jones and McHugh clearly demonstrate that the development of professional medical care in French hospitals was an extended process which stretched back into the early modern era.<sup>8</sup> Yet they argue that the crucial developments came in the second half of the seventeenth century and that prior to this, French hospitals retained their medieval focus on providing general charitable care to the poor. These studies also pay little or no attention to the development of plague hospitals, which, as I show in this article, played an important role in the expansion of medical care in early modern France. Many of the developments which Jones and McHugh demonstrate were crucial to this wider process were also implemented in plague hospitals, with these measures subsequently being adopted more widely, especially by the *hôtels-Dieu* (the principal general hospitals in early modern France).

While French plague hospitals are typically seen as places of confinement where little effort was made to care for the sick, these institutions were in fact staffed by physicians, surgeons, nurses, and apothecaries, who provided a range of important medical treatments for the infected. A study of French plague hospitals is also important because, while they are largely ignored in the wider literature on pre-modern European epidemics, France probably had more plague hospitals than any other state in early modern Europe (see [Table 1](#)). The little focused research done on French plague hospitals concentrates on the *hôpital* Saint-Louis, which was established in Paris in the early seventeenth century. Yet while the *hôpital* Saint-Louis is often seen as the first purpose-built plague

**Table 1.** Foundation Dates of French Plague Hospitals, 1456–1631

|                      |                   |
|----------------------|-------------------|
| Rodez                | 1456 <sup>a</sup> |
| Roanne               | 1465              |
| St. Flour            | 1466              |
| Bourg-en-Bresse      | 1472              |
| Arles                | 1472              |
| Lyon                 | 1474              |
| Marseille            | 1476              |
| Carpentras           | 1481              |
| Martigues            | 1482              |
| Nantes               | 1484              |
| Grenoble             | 1485              |
| Orange               | 1490              |
| Mâcon                | 1498              |
| Agen                 | 1503              |
| Villeneuve           | 1503              |
| Dijon                | 1506              |
| Montpellier          | 1506              |
| Toulouse             | 1508              |
| Nîmes                | 1515              |
| Châlons-en-Champagne | 1516              |
| Nevers               | 1518              |
| Tours                | 1520              |
| Amiens               | 1520              |
| Bordeaux             | 1520 <sup>b</sup> |
| Laon                 | 1521              |
| Reims                | 1522              |
| Aix-en-Provence      | 1523 <sup>c</sup> |
| Argentan             | 1531              |
| Avallon              | 1531              |
| Paris                | 1534 <sup>d</sup> |
| Albi                 | 1534              |
| Orléans              | 1539              |
| Coutances            | 1541              |
| Beauvais             | 1545              |
| Cherbourg            | 1546              |
| Pont-Audemer         | 1547              |
| Bayonne              | 1547              |
| Compiègne            | 1553              |
| Auch                 | 1561              |
| Caen                 | 1564              |
| Rouen                | 1580 <sup>e</sup> |
| Lisieux              | 1584              |

*Continued*

|          |                   |
|----------|-------------------|
| Chambéry | 1587 <sup>f</sup> |
| Apt      | 1588              |
| St. Pons | 1608              |
| Limoges  | 1631              |

---

Provisional list of forty-six plague hospitals established in France between the mid-fifteenth and mid-seventeenth centuries. The information is gleaned from civic archives (especially the deliberations and financial accounts, series BB and CC, though other information is contained in the series AA ["actes constitutifs et politiques"] and in GG which deals with hospitals and similar institutions), the *inventaires sommaires*, which are calendars of municipal and departmental archives, as well as secondary studies of both plague and histories of individual towns. The list is not comprehensive, and undoubtedly further research will uncover others, while other dates may be revised. I have given indications about where there may be uncertainty about dates and have erred on the side of caution and settled for a later date when there is ambiguity about earlier references.

<sup>a</sup>The town may have had a plague hospital in 1348, though, if so, it was not until the mid-fifteenth century that it appears again.

<sup>b</sup>Though there was possibly one there by 1504.

<sup>c</sup>Possibly already a plague hospital in the town by the end of the fifteenth century.

<sup>d</sup>The hospital constructed at the Grenelle in 1580 was intended to be the city's first permanent purpose-built plague hospital, though it was not the first one in the city itself.

<sup>e</sup>Developed discussions about constructing a plague hospital in Rouen began as early as 1519 and continued periodically throughout the sixteenth century, though it is not clear if these plans were put in place before 1580.

<sup>f</sup>Though some type of building was already being used to isolate the infected poor from 1565, it is not clear if they were treated here too.

hospital in France, it was not even the first such institution in Paris. For Colin Jones, the foundation of the *hôpital* Saint-Louis "had virtually no provincial echoes."<sup>9</sup> Yet numerous towns across France had developed their own permanent plague hospitals long before the foundation of the *hôpital* Saint-Louis. Furthermore, privileged focus on *hôpital* Saint-Louis misrepresents the impetus which lay behind the establishment of plague hospitals. It came about through a royal foundation, established by Henry IV as part of his wider remodeling of Paris, whereas French municipal governments were overwhelmingly the principal agents in the development of plague hospitals. Urban administrations developed these institutions for the plague sick—and only the plague sick—and provided them with the key treatments used against the disease in the type of hospital environment which early modern medical experts believed to be the most conducive for healing. Furthermore, this article shows that focusing solely on permanent structures—such as the *hôpital* Saint-Louis in France (or those other monumental buildings in Milan or Venice)—distorts our understanding of early modern medical care. Most towns developed modest or temporary institutions, which left traces only in the deliberations and financial accounts of individual towns and thus have often remained hidden from the wider historical record. While there can be a tendency to downplay the importance of temporary structures, they performed the same role and offered the same range of treatments and services that we find in permanent plague hospitals.

Rather than focus on the Saint-Louis plague hospital, one highly distinctive institution constructed in the later stages of plague's appearance in France, this article is based on an examination of forty-six towns throughout the kingdom

across two centuries. It focuses in particular on the period between the emergence of plague hospitals in mid-fifteenth century and the plague of the 1630s, probably the most devastating outbreak of the disease since the Black Death.<sup>10</sup> Furthermore, from the outbreak of the 1630s the increasingly absolutist Bourbon monarchy began to seek to exert control over anti-plague measures across France, to the extent that the actions taken at Marseille in the 1720s were largely managed by the crown. Indeed, Colin Jones has observed that “plague was one of the rather few occasions on which the absolutist state assumed powers that were really absolute.”<sup>11</sup> Yet this article demonstrates that, rather than innovate, the Bourbon monarchy sought control of a system which had been devised by municipal governments as far back as the mid-fifteenth century—at the center of which stood the development of specialist plague hospitals where the sick received professional medical care.

### The Emergence of Plague Hospitals in France

There was a wider European trend, which encompassed Italy, France, Spain, the Low Countries and the Holy Roman Empire, to establish plague hospitals during the fifteenth century.<sup>12</sup> The emergence of plague hospitals during this period reflected a growing understanding of the role contagion played in spreading plague. Plague hospitals were intended both to prevent the spread of the disease by separating the sick from the healthy and to provide the infected with access to specialist medical care. As many of the key medical ideas about the treatment of plague emerged in Italy, it is perhaps no surprise that many of the earliest French plague hospitals emerged in towns lying geographically close to Italy, including Lyon, Marseille, and Bourg-en-Bresse.<sup>13</sup> Unsurprisingly, towns in the southeast of France in the fifteenth century were more influenced by the Italian model of plague care—which was based around the extensive use of quarantine—than their counterparts in the north and west of the kingdom.<sup>14</sup> The early adoption of plague hospitals by small towns, many of which, such as Saint-Flour, lay in remote areas, also shows how far the latest medical ideas about plague penetrated into southern and central France.

French urban governments from the mid-fifteenth century increasingly placed the infected in specialist institutions to keep them separate from both the healthy and those with other illnesses. In 1516, Châlons-en-Champagne’s *échevins* (principal officers in the town council) constructed a plague hospital and prohibited all other hospitals and care institutions in the town from receiving the infected.<sup>15</sup> Three years later, Rouen’s municipal council determined that they required a specific hospital for the “poor people sick from the plague, because each day they have been placed with the other sick in the *Hôtel-Dieu* of the Madelaine” (“...povres malades de la maladie de peste pour ce que chascun jour ilz sont mis avec les autres malades en l’Ostel Dieu de la Magdalaine”).<sup>16</sup> Even when plague sick were placed under the care of the *Hôtel-Dieu*, this did not necessarily mean that they were placed in general wards alongside other patients. Plague hospitals could be under the authority of the *hôtels-Dieu*, which were under the control of municipal councils.<sup>17</sup> Even towns which sent the plague sick to a *hôtel-Dieu* itself typically placed them in a separate building or wing, where they received specialist care and were kept apart from other patients. In 1520, Amiens constructed a new building on land next to the

*Hôtel-Dieu* to use as a plague hospital, while Limoges treated plague victims in separate temporary buildings they constructed adjacent to its *Hôtel-Dieu* in 1631.<sup>18</sup> At Dijon, the town council constructed a distinct building—which was also separated by a wall—at the Saint-Esprit hospital (the town’s principal general hospital) for the plague infected and prohibited the hospital authorities from admitting the sick into the main hospital.<sup>19</sup> In the early 1530s, the governors of Paris’s *Hôtel-Dieu* constructed a new building for the plague sick specifically so that they would not infect the other patients.<sup>20</sup>

Moves were already being taken to introduce medical staff into hospitals in French towns during the later Middle Ages. For instance, surgeons were operating in limited ways in some of Rouen’s Church-run hospitals by the mid-thirteenth century, and more fully from the mid-fifteenth century as the municipal council came to assert its authority over hospital provision in the city.<sup>21</sup> Yet, although some medical staff on municipal salaries could be attached to a *hôtel-Dieu*, numbers were low before the late sixteenth century, and there was little differentiation between types of patients in the general wards. In contrast, plague hospitals offered a more specialist environment where patients received close attention from a range of professional medical staff. The need to contend with recurring outbreaks of plague also led municipal governments to develop a permanent medical team. At Laon, a plague surgeon was employed from the 1550s—when a plague hospital was first established in the town—and this soon turned into an official permanent appointment (the *chirurgien jurés des pestiférés*).<sup>22</sup> The medical measures taken initially for plague hospitals were also applied more widely to the *hôtels-Dieu*. A physician was first employed to treat the sick of the *Hôtel-Dieu* in Paris in 1537, following the appointment of medical staff to serve in the city’s plague hospital earlier in the decade.<sup>23</sup> When plague struck Paris again in 1580 and the city established a permanent plague hospital at the Grenelle with a large medical staff, new rules were drawn up for the city’s *Hôtel-Dieu* which stipulated that “each day, physicians, surgeons and barbers [barber-surgeons] come there twice a day to visit and treat the sick” (“tous les jours, medecins, chirurgiens et barbiers quy y viennent, deux fois le jour, visiter et penser les malades”).<sup>24</sup>

Although plague was not the first epidemic disease to lead to the creation of specialist hospitals in France—leper houses had existed across the kingdom from the twelfth century, while hospitals for syphilitics were established in many towns in the 1490s—these institutions were principally places of confinement and they provided little in the way of treatment. In contrast, plague hospitals were specifically designed as institutions where the sick would receive medical care.<sup>25</sup> When the Parisians built the plague hospital at the Grenelle, it was so they could “treat and medicate the plague sick separately from those with other illnesses” (“pour y estre traictez et medicamentz à part et separement des autres malladdes”), while Nantes constructed its first permanent plague hospital in 1571, “to lodge and treat the plague infected” (“pour loger et traicter les pestiferez”).<sup>26</sup>

Specifically, plague hospitals were designed as places where the poor could receive treatment. From the fifteenth century—but especially during the sixteenth century—there was an increasing view that plague was a disease of the poor.<sup>27</sup> While some plague hospitals treated all social classes (especially at the first appearance of the disease), as the outbreak increased in severity—and

threatened to overwhelm the resources of the institution—wealthier residents were typically treated in their homes instead. In 1519, the municipal council of Troyes ruled that those infected who did not have the means to pay for medical treatments were to be placed in the extramural plague hospital, whereas those who could afford to meet these costs were to be treated “at their own expense in their homes” (“a leurs despens en leurs maisons”).<sup>28</sup> Similarly, at Dijon those who could afford to pay surgeons or physicians were ordered to stay at home and receive treatment there, while the poorer members of society were admitted to the plague hospital to receive medical care.<sup>29</sup> Rouen had separate plague surgeons to tend to those treated at home and those placed in the plague hospital.<sup>30</sup> It made sense medically for the wealthier to be treated at home as they were more likely to live in well-ventilated and well-heated houses (which were also not overcrowded), where they had access to clean clothing and bed linen as well as good diet—all of which were fundamental elements in the medical treatment of plague.<sup>31</sup> As physicians increasingly identified a lack of food and medication—combined with insufficient access to well-ventilated housing—as key causes of plague, urban governments prioritized the poor when giving access to a plague hospital. Where space was available, the infected from all social classes might be sent to the plague hospital. While Paris favored home treatment for the wealthy and care in the plague hospital for the poor in the sixteenth century, with the construction of the large Saint-Louis plague hospital in the early seventeenth century all the infected were brought to this institution.<sup>32</sup> Yet seventeenth-century Paris was exceptional in possessing the largest plague hospital in Europe and most French towns by necessity used plague hospitals principally as institutions for the poor.<sup>33</sup>

While largely focused on providing care to the urban poor, the remit of some plague hospitals extended to surrounding villages. For instance, in 1580 Rouen’s municipal council ordered a physician and surgeon to travel to neighboring villages to check their populations for symptoms of plague and then bring the infected to the city’s plague hospital for treatment.<sup>34</sup> Yet other towns sought to keep the infected from neighboring villages at a distance. At Troyes, when one man and three women came from the nearby village of Saint-Mards, which was infected by plague, to sell goods in the town, they were arrested and executed.<sup>35</sup> For other towns, surrounding villages functioned as refuges where the wealthier urban classes fled to during an outbreak. In 1592, wealthy townswomen from Narbonne who had sheltered at the nearby village of Bizanet were exempted from the requirement to spend two weeks in the town’s extramural quarantine center and were instead allowed to spend this time in home isolation due to the presence of enemy soldiers in the region.<sup>36</sup> As with treatment for plague, the wealthier classes could be allowed to spend quarantine and convalescence in their homes, though this also brought benefits in the form of saving town councils money on treatments and easing pressures on space.

### The Design and Function of Plague Hospitals

As places where the infected were segregated and provided with medical treatment, municipal councils often constructed plague hospitals in extramural locations to reduce the chances of contact between sick—and particularly the miasmatic air they exhaled—and other townspeople. When in 1548 the



governors of Paris's *Hôtel-Dieu* proposed to transform municipal-owned houses in the center of the city into a plague hospital, the municipal councils objected because of fears that the "corrupt air. . . could infect the rest of the body and the members and places of this town" ("mauvais air. . . peut infecter tout le reste du corp et tous les membres et endroitz d'icelle ville").<sup>37</sup> Rather than repurpose buildings at the heart of the city, the Parisian municipal council instead ordered the construction of a temporary plague hospital outside the city walls until such time as a new extramural institution could be raised. When plague struck Paris again in 1580, the city finally constructed this purpose-built plague hospital outside the city on the plain of the Grenelle.

Although it was desirable to site plague hospitals in extramural locations to reduce the risk of infection, it was important that they were not located too distant from urban centers. The extramural plague hospital Troyes's municipal administration established in the early sixteenth century had to be abandoned because it lay too far from the town, which led them to construct a new hospital closer to the walls.<sup>38</sup> Plague hospitals needed to be close to towns so that the sick could be brought there without having to be transported over long distances. Yet it was also desirable to keep these institutions away from main roads. In 1582, Nevers's *échevins* planned to transform the extramural hospital of Saint-Antoine into a specialist plague hospital, but they soon abandoned this idea because the hospital lay on the road to Paris and Lyon. Instead, they built a plague hospital just outside the walls but away from the main road.<sup>39</sup>

Rather than construct new structures, some towns transformed existing buildings into plague hospitals. Aix-en-Provence turned a nearby bastide into a plague hospital, while Auch and Bergerac converted houses into plague hospitals.<sup>40</sup> Vacant leper houses were especially popular venues for plague hospitals. When plague hit Beauvais in the 1620s, the town council repurposed the abandoned leprosarium of Saint-Lazare-lès-Beauvais as a plague hospital, while Narbonne placed the plague infected in their leper hospital in 1652.<sup>41</sup> While the remit of the *Chambre de la Générale Réformation des Hospitaux et Maladeries de France* (set up by Louis XIII to reform the administration of France's hospitals, including leper houses) may have played a role in this process, French municipal councils had long transformed empty leprosariums into plague hospitals.<sup>42</sup> Apt, Dijon, and Laon all turned leper houses into plague hospitals in the sixteenth century, while Lyon's first plague hospital, a converted leper house, was established in 1474.<sup>43</sup> Although some historians have argued for a conceptual link in the minds of early modern populations between plague and leprosy, there is little evidence for this.<sup>44</sup> Rather, leper houses were transformed into plague hospitals because they possessed many desirable characteristics. As well as being situated in remote locations, they typically consisted of individual cells based around a central open area—which was the favored design for many purpose-built plague hospitals in early modern France. Furthermore, leper houses were often already under municipal jurisdiction and with the decline of the disease in the later Middle Ages they often stood empty, which saved significant costs in having to construct a new building.<sup>45</sup> Municipal governments were also accustomed to offering similar types of care to lepers, including the provision of good clothing and bedding, a suitable diet, and appropriate shelter, as well as medical treatments such as blood-letting.<sup>46</sup>

Other towns transformed religious buildings into plague hospitals.<sup>47</sup> During the devastating plague that struck Saint-Flour in the late 1620s, the town council converted an unoccupied chapel at the nearby hamlet of Montégut (where many families from the town went to shelter from the plague) into a plague hospital.<sup>48</sup> In using religious structures and other buildings for plague hospitals, French towns were acting in a similar way to towns in other parts of Europe, including Italy. Florence used private residences and religious buildings as plague hospitals, rather than building purpose-built structures like Milan or Venice.<sup>49</sup> There were many advantages to using religious buildings. First, spiritual power formed a key element in early modern medical healing. Second, as with leper houses, the layout of these spaces, and particularly monastic houses, often consisted of rooms around a central courtyard, and included a church, another design favored for plague hospitals. Third, religious buildings came with consecrated ground, where the plague dead could be buried separately from others. This was also a crucial component in the design of plague hospitals, which often contained cemeteries within their precincts to minimize the chances of corpses spreading the infection. The plague hospital established at Bourgen-Bresse in 1472 was established at the extramural priory at Brou, which was also the location of a cemetery.<sup>50</sup> The plague hospital of St. Marcel, refurbished at Paris in 1620, had a cemetery within its walled perimeter, while Nevers's town council had the bishop consecrate ground next to the plague hospital in 1583 to use as a cemetery.<sup>51</sup> Although, even when using extramural buildings for plague hospitals and cemeteries, French municipal councils could have to pay compensation to local farmers. In 1630, Narbonne paid damages in the form of grain to a farmer who complained that he could not safely work the lands he held next to the town's plague hospital because the infected had been buried there.<sup>52</sup>

While many municipal councils constructed permanent plague hospitals or transformed existing stone buildings, others assembled temporary structures. The first plague hospitals constructed at St. Flour in 1466 and at Bourgen-Bresse in 1472 (among the earliest plague hospitals in France) were wooden structures.<sup>53</sup> This form of construction existed for a long period and towns such as Rouen and Nevers continued to make use of wooden structures through the end of the sixteenth century.<sup>54</sup> There were many advantages, both medical and financial, to using temporary plague hospitals. As well as being quick and cheap to construct, they could be destroyed once the epidemic had passed, thus reducing concerns about re-infection. Even towns and cities that had permanent plague hospitals (such as Bordeaux, Narbonne, Lyon, Paris, Troyes, Amiens, and Grenoble) used temporary structures alongside their permanent institutions, with the permanent buildings forming the nucleus of larger complexes that incorporated wooden structures where the sick were placed during especially severe outbreaks of the disease.<sup>55</sup> The use of individual wooden huts or lodges within the precincts of plague hospitals during severe outbreaks was medically desirable because it allowed hospital authorities to avoid overcrowding in the main building and maintain the most advantageous conditions for medical care.<sup>56</sup> This was similar to practices in Italy, including Milan and Venice, where temporary buildings were constructed to enlarge the permanent plague hospitals during particularly severe outbreaks.<sup>57</sup>

Nonetheless, there were also disadvantages to the use of temporary structures. First, a municipal council might not erect a new hospital each time plague struck. While Mâcon first used a plague hospital in 1498, when plague hit in 1518 the municipal council instead ruled that the infected were to be expelled from the town or else barricaded in their houses, a measure which fell hardest on the poor.<sup>58</sup> Similarly, although Bourg-en-Bresse used a plague hospital during the outbreaks of the 1470s and 1480s, when plague hit in 1502 they instead decided to expel the infected (although they soon returned to using a plague hospital).<sup>59</sup> Not having a permanent plague hospital—or even a designated customary place to erect one—meant that town councils often had to hold fresh discussions about where it should be constructed, thus losing valuable time in the war against the disease. After several decades of such discussions in Rouen in the first half of the sixteenth century, the town council decided in August 1557 to preemptively prepare a plague hospital, “in case God wished to inflict the inhabitants of this town. . .with a contagious disease” (“ou cas que notre Dieu voulsist affliger les habitans de ceste ville. . .de malladie contagieuse”).<sup>60</sup> However, it appears that this project was never realized and when plague struck the town in 1580 the town council again debated where to build the hospital.<sup>61</sup>

Yet discussions about the siting of a plague hospital were important. As plague hospitals were places where the sick received medical care, a range of environmental considerations based on contemporary medical beliefs about the most conducive environment for healing was taken into consideration when determining the location of these buildings. As contemporary medical beliefs held that miasmatic air spread the infection, regulation of air formed a key aspect of the treatment of plague.<sup>62</sup> When planning to construct a plague hospital, municipal councils employed physicians to advise on the most suitable location. In 1552, Rouen sent two physicians to examine the various locations proposed for the plague hospital “to understand the disposition of the air” (“pour entendre la disposition de l’air”).<sup>63</sup> In 1627, Amiens’s municipal council appointed three physicians to determine the best site for a new permanent plague hospital. When choosing a location, the physicians paid particular attention to avoiding “pestilential winds” (“les vents pestilentiels”). The design they settled on for the hospital itself—and particularly the positioning of the doors and windows—was shaped by concerns to avoid the convergence of pestilential winds.<sup>64</sup> In the early seventeenth century, the *hôpital* Saint-Louis was constructed on a perfect north-east axis to avoid winds blowing noxious smells from the nearby rubbish dump at Montfaucon.<sup>65</sup> These medical ideas about the circulation of air were then influencing the design of plague hospitals across Europe.<sup>66</sup> This also impacted the manner in which patients were treated in plague hospitals. The surgeon Baltazar du Herval, who served in the Paris plague hospital in the 1580s, recorded that patients would “gather around me, like the hen and her chicks, turning their face[s] against the wind, and having the wind behind me, so as not to receive their breath nor the vapors from their wounds when I dress their plasters” (“s’assembloient à l’entour de moy, comme pour exemple la pouille ses poulets, faisant tourner le visage contre le vent, & moy ayant le vent au dos, afin de ne recevoir leurs aleines, ny les vapeurs de leurs playes quand ie leur ostois leurs emplastres”).<sup>67</sup>

Physicians composed texts specifically for municipal councils that described in medical terms the ideal form of a plague hospital. For instance, in 1566 the

physician François Valleriole set down his ideal conception of a plague hospital in the *Traicté de la peste*, which he addressed to the *consuls* of Arles. He stated that it was “very necessary for the good towns to have a designated place to put the plague infected” (“plus necessaire aux bonnes cites c’est avoit certain lieu deputé pour retirer les maladies pestiferés”) and that this hospital should ideally be located outside the town and away from public spaces, including busy highways. In terms of design, it was to be situated “between the equinoctial east and the septentrion in order that it did not overheat too much in the midday heat.” He writes that his proposed design for the hospital will ensure that “it has been competently cooled” because it will “freely receive the septentrion [i.e. wind from the north]...this being the driest and healthiest and expelling all the bad vapors and infection from the air” (“entre l’orient equinoctial et le septentrion, afin que la chaleudu mydi n’eschauffe par trop, et l’esté ait competente fraischeur...Car telle maison fault que reçoive librement le vent du septentrion...estant celuy le plus sec, le plus sain et qui plus purge et chasse toute mauvaise vapeur et infection de l’air”). He stated that plague hospitals should have a range of separate chambers, for both patients and medical staff, the layout of which was again determined by the circulation of air.<sup>68</sup>

The concern to avoid miasmatic air was part of a wider aim by municipal councils to find the most salubrious environments in which to locate plague hospitals. Many French towns located plague hospitals in gardens. Medical literature of the period, including the *Regimen sanitatis* and plague *consilia*, stressed the importance of gardens and agreeable surroundings for the improvement of health.<sup>69</sup> When Amiens decided to build a separate hall at the *Hôtel-Dieu* to use as a plague hospital in 1520, they constructed it at “a very beautiful place...at the end of the garden” near the main building of the hospital (“avoit tres beau lieu...au bout du jardin”).<sup>70</sup> When Rouen appointed a commission of medical experts (including physicians and surgeons) in the 1550s to find the best location on which to build a plague hospital, they purchased a garden; indeed, the town continued to use gardens throughout the sixteenth century for its temporary plague hospitals, before constructing a permanent, extramural pest house in the seventeenth century.<sup>71</sup>

Proximity to water was an additional consideration when deciding on the location for a plague hospital. Medical treatises on plague placed an increasing emphasis on water, with contaminated water increasingly being identified as a reason why the poor were more susceptible to plague.<sup>72</sup> Valleriole advised that plague hospitals should be situated in a location with healthy air and surrounded by running water, such as a stream, but away from sources of stagnant water, such as ponds.<sup>73</sup> Certainly, municipal councils sought to make sure they could provide plague hospitals with access to clean running water. Lyon’s *consuls* established the city’s Saint-Laurent plague hospital near one of the city’s six public wells and adjacent to the Choulans stream, which provided the hospital with a further source of clean water.<sup>74</sup> As the presence of clean water was medically important for the treatment of the infected, plague hospitals were often constructed nearer to smaller rivers or streams, which were fresher than their larger counterparts. In 1518, Rouen decided to establish an extramural plague hospital next to the Aubette stream (rather than the polluted Seine), instructing those who had houses backing onto it not to dispose of their waste into the water.<sup>75</sup> At Grenoble, the plague hospital was built on an island in the Drac, a

tributary of the larger River Isère which flowed through the city.<sup>76</sup> Water was both important for the healing process and for keeping the healthy at a distance from the infected. In 1582, Nevers made a custom-built stream specifically to bring water to the plague hospital and separate the institution from the town.<sup>77</sup> Flooding was also increasingly seen as a cause of plague in medical texts in the sixteenth century and this was reflected in concerns with the siting of plague hospitals.<sup>78</sup> In the mid-sixteenth century, Amiens's municipal council transformed a building owned by the priory of Saint-Roch into a plague hospital because it was "surrounded on all sides with water" ("environnez d'eau de toutes pars").<sup>79</sup> Yet in 1581 they constructed a new plague hospital because physicians advised them that this hospital, which they had been using for two decades, was now "unhealthy for the plague infected" ("malsain pour lesdicts pestiférez"), because the waters which surrounded it were now flooding the building during times of heavy rain.<sup>80</sup>

An evolution in the design of plague hospitals occurred over the course of the sixteenth and seventeenth centuries. In particular, there was a move away from the communal wards favored by French plague hospitals of the sixteenth century to individual chambers which became increasingly common from the early seventeenth century. In the 1580s, the physicians who planned the new plague hospital at Amiens designed a building that consisted of a single structure divided into two halls (one of which was probably for the staff and the other for the infected). When Amiens's municipal councilors decided to construct a new plague hospital in the 1620s—and again brought in physicians to advise on the design of the building—they chose a plan of individual cells pivoted around a central chapel.<sup>81</sup> Towns across France were then replacing their existing plague hospitals with new buildings with individual rooms. This design was particularly prominent in northern France, probably as a result of the construction of the Saint-Louis plague hospital in Paris which used this design. Following the devastating plague of 1628-32, Rouen constructed its own Saint-Louis plague hospital which was used when the disease struck the city again in 1655.<sup>82</sup> Yet other northern towns had long made use of separate rooms, though they modified the design of these structures over time. While Troyes had established a plague hospital with separate chambers in 1518, when the town council constructed a new plague hospital in 1629 they redesigned it along the lines of that used Amiens, having isolated rooms which pivoted in a semicircle around a chapel.<sup>83</sup>

Yet in other parts of France, especially the southeast, towns tended to retain the use of wards (rather than move toward individual chambers) into the seventeenth century. This geographical divergence in the design of French plague hospitals from the late sixteenth century may reflect debates occurring in Italy, where many physicians and other medical experts argued that wards were preferable because large halls dispersed air better than individual rooms. As Jane Stevens Crawshaw observes, in Italy "open wards did not give way to private rooms as the dominant space for the sick [in plague hospitals] until the eighteenth century, despite concerns about contagion."<sup>84</sup> Different designs for plague hospitals could be used concurrently in the same city. While Paris's *hôpital* Saint-Louis moved toward individual rooms in the early seventeenth century, the city's St. Marcel plague hospital—which was refurbished at the same time—maintained the traditional design, consisting of a hall for patients and a separate

block for staff.<sup>85</sup> As late as 1669, when Dieppe constructed an extramural plague hospital, it was based around open wards.<sup>86</sup>

### Staffing Plague Hospitals

No matter what design was used for the plague hospital, concerns about staff safety were paramount. This reflected the key role which medical staff played in these institutions. It was desirable to have different medical experts work together against the plague. In the 1520s, Grenoble's town council brought together the city's physicians, surgeons, barber surgeons, and apothecaries to advise on how to combat the disease.<sup>87</sup> Standing at the pinnacle of the medical hierarchy, physicians played an important role in the fight against plague in early modern France. Many towns employed one or more physicians to advise on what measures they should take to combat plague.<sup>88</sup> Already by 1483, Bourgen-Bresse employed a physician to advise on how best to prevent plague from striking the town; then in 1572, the municipal council set up a health board staffed by four physicians, seven apothecaries, three surgeons, and five barber-surgeons, to take preemptive measures to stop plague from taking hold in the town.<sup>89</sup> The physician who led Rouen's health board during the devastating plague of the 1640s had written a medical treatise on sanitation (and would eventually die from plague in the 1680s, after having filled the role of plague physician in the city for the previous 39 years).<sup>90</sup> As we see, faith in the medical profession from urban authorities remained high in early modern France.<sup>91</sup>

As well as advising on the measures to take, physicians tended to the sick directly and made daily inspections of the patients in plague hospitals. At Lyon, the physician made a tour of the Saint-Laurent plague hospital each day to hear "the complaints of the sick" ("les plaints des malades") and the comments of the surgeons and other staff, following which he advised the specific treatments each patient should receive.<sup>92</sup> Service in a plague hospital provided physicians with practical experience of treating plague, which enhanced the book learning they received at university. In his plague treatise of 1635, the physician Jean Cottin, who was based in the town of Laon, wrote how the plague physician "studied plague in the midst of plague victims: a dangerous school—but one infinitely more instructive than books."<sup>93</sup> More widely, plague physicians drew on both experiential approaches and academic medical literature when treating the sick in plague hospitals.<sup>94</sup>

Physicians worked alongside surgeons, who were responsible for performing many of the key medical procedures used to treat the disease, including phlebotomy and the lancing of buboes.<sup>95</sup> Surgeons were skilled and knowledgeable medical practitioners and, as Sabine Sander has shown, even many barber-surgeons read medical treatises.<sup>96</sup> There was also a breakdown in distinctions between physician and surgeon in the environment of a plague hospital. Duties and responsibilities such as the prescribing of drugs, which was typically the preserve of physicians, were taken on by surgeons.<sup>97</sup> Baltazar du Huval, surgeon at the Paris plague hospital in the 1580s, described how he would make rounds, administering various types of treatments and drugs to the sick.<sup>98</sup> When plague struck Bordeaux in 1636, the plague hospital's surgeon demanded that—in addition to a monthly salary of 100 *livres*—he be allowed to treat and medicate the plague sick.<sup>99</sup> At Rouen the surgeons employed in the plague hospital in the

seventeenth century were paid “to treat and medicate” (“[a] panser et medicenter”) the infected.<sup>100</sup> The apprentice surgeon who treated the plague sick at Lyon in 1628 was paid 80 *livres* per month and provided with all the drugs he required to treat the sick.<sup>101</sup> By these means, surgeons—and even apprentice surgeons—could expand the scope of their authority into areas normally reserved for physicians.<sup>102</sup>

Service in a plague hospital provided apprentice surgeons with an opportunity to fast-track their careers. Certainly, given the dangers of tending to the plague infected there had to be significant incentives to encourage medical professionals to treat them. The plague surgeon employed at Abbeville in 1483 died within two weeks of his appointment and the town council had to double the wages for the post to find a new successor.<sup>103</sup> Municipal councils had the power to offer other incentives beyond increased wages to those willing to serve in a plague hospital. As well as receiving wages of 75 *livres* per month for treating the infected in Bordeaux’s plague hospital in 1629, the apprentice surgeon, David Laporte, was to be raised to the position of master surgeon when his term was finished and given the salaried, permanent office of *chirurgien de la Peste* (which was part of the permanent plague apparatus put in place to ensure that the city was ready when outbreaks of the disease struck).<sup>104</sup> This measure was employed widely by municipal councils across France. When plague struck Rouen in the mid-seventeenth century, they employed twelve apprentice surgeons to treat the plague sick in return for which they were permitted to establish themselves as masters.<sup>105</sup> Eventually, these measures, which were first introduced specifically into plague hospitals from the early sixteenth century, became rolled out more widely in France’s general hospitals, especially from the late seventeenth century.<sup>106</sup>

While municipal councils employed apprentice surgeons, nonetheless they wanted to ensure that they had capable people. To this end, they asked physicians and master surgeons to recommend the most talented candidates.<sup>107</sup> This was part of a wider concern to ensure that the medical staff they employed in plague hospitals were highly skilled. In May 1583, Nevers’s municipal council sent a delegation 60 kilometers to the town of Clamency to find the surgeon Antoine Lecoq and persuade him to come and treat their plague sick, as he was known to be a “leader and expert in his art” (“homme fort expert et son art”).<sup>108</sup> In 1592, Narbonne brought a surgeon from Béziers—some 30 kilometers away—to treat their plague sick, while in the late sixteenth century Laon sent for Augustin Dautreppe, from Vervins, 40 kilometers away, to come and give medical treatment to the infected in the plague hospital.<sup>109</sup> Clearly, municipal councils were prepared to look far and wide to ensure that they had competent staff for their plague hospitals. With increasing royal control of plague care from the mid-seventeenth century, the state began to appoint plague physicians to towns. While the first appointments for medical staff to treat plague victims at Bourgen-Bresse were made by the town’s *syndics* in the 1470s, Jean-Baptiste Colbert, as Louis XIV’s chief minister, appointed the physician sent to the town in 1675 to treat plague victims (this was the start of a trend and similar instructions were given in 1678, 1681, 1700, and 1707).<sup>110</sup>

Regardless as to who appointed them, surgeons and physicians were employed not just to treat the sick but also to provide an accurate diagnosis of plague.<sup>111</sup> Having a reliable identification was crucial because urban authorities

imposed significant restrictions on their populations during outbreaks of plague—which were not typical for other diseases—including mass quarantine, closure of shops and businesses, and restrictions on travel. To prevent the introduction of these unwanted measures, town councils needed to act quickly to prevent the disease from spreading. Apt's *consuls* employed physicians and surgeons to examine corpses and report whether or not they had died from plague.<sup>112</sup> It was also important to correctly identify plague so that those who were sick from diseases with similar symptoms were not placed in a plague hospital. When plague struck Lyon in 1628, a physician examined every person brought to the plague hospital before they were admitted to check that they had plague, while surgeons were sent to inspect the sick to ascertain if they should be brought to the plague hospital.<sup>113</sup> Similarly, at Paris the most experienced surgeons were placed at the entrance to the *hôpital* Saint-Louis to confirm that those admitted to the institution were infected with plague, while surgeons stationed at the doors of the *Hôtel Dieu* ensured that anyone with plague was promptly redirected to the *hôpital* Saint-Louis instead.<sup>114</sup> Bordeaux's plague surgeon searched for buboes on the thigh or armpits (taken as the key sign for the presence of plague) and those displaying these symptoms were then either sent immediately to the plague hospital or placed in home isolation.<sup>115</sup> When a nine-year-old girl was discovered to have two buboes at Bordeaux in May 1629, for instance, the *jurats* immediately opened up the hospital and staffed it with physicians, surgeons, and apothecaries.<sup>116</sup>

The physicians, surgeons, and apothecaries who worked in plague hospitals were supported by a range of other staff, including nurses, cooks, and cleaners. These people also played key roles in the medical treatment of the sick, particularly as the regulation of diet and environment were key elements of early modern medicine.<sup>117</sup> Other support staff performed important tasks, such as transporting the sick to the hospital for treatment and taking away the dead for burial in special cemeteries.<sup>118</sup> The need for a diverse range of support staff ensured that women were employed in plague hospitals. Women often performed tasks which had traditional feminine attributes, such as washing clothing and bedding. This was a crucial task as the provision of clean bedding and clothing was important for the treatment of patients.<sup>119</sup> Women could also tend to the sick and perform medical procedures.<sup>120</sup> There may have been a financial incentive to employ women, as they were paid modest wages. At Nevers, women were paid only 8 *livres* per month for directly treating the sick (the male barber-surgeon there received a monthly wage of 30 *livres*).<sup>121</sup> Some women volunteered to treat the sick and asked for no payment at all, such as Catherine Heurtault who traveled from Chartres to Rouen in 1668 specifically to treat the plague sick.<sup>122</sup>

The treatments the sick received in a plague hospital were grounded in early modern medical knowledge and included the provision of drugs, such as theriac, which were expensive and thus typically beyond the reach of the poor. Civic councils prioritized the purchase of drugs for plague hospitals. When in 1533 Lyon's plague hospital began to run out of the funds the *consuls* had earmarked for the purchase of drugs, the municipal council immediately set about raising new sources of revenue to purchase these medicines. In 1580, Narbonne's *consuls* gave the town's health board the power to requisition any medicines they required.<sup>123</sup> Some towns also appointed apothecaries to run



pharmacies in plague hospitals, while others sought the advice of physicians to ensure they purchased the most effective drugs to use against plague.<sup>124</sup> In 1603, Lille's municipal council purchased a wide range of expensive medicines from the apothecary Charles Pinson to provide to the infected poor.<sup>125</sup> In 1564, Mâcon provided the plague surgeon with the drugs he required, while in 1582 Nevers sent a delegation to Paris to first consult with physicians about the best drugs for plague and then to purchase these medicines in the city's extensive medical marketplace.<sup>126</sup> Drugs were tailored to suit the needs of individual patients and were based upon their medical condition as well as their age and sex. Baltasar du Huval described how in the Parisian plague hospital in the 1580s medications which included arsenic in their ingredients were "reserved for little children" ("réservé aux petis enfans").<sup>127</sup> Town councils also provided these drugs to the medical staff working in plague hospitals to help them avoid infection. When plague struck Bordeaux in 1629, for instance, the staff of the plague hospital were issued theriac.<sup>128</sup> The physicians treating the plague sick at Aix-en-Provence washed their hands in vinegar as a form of disinfection and smoked tobacco to dispel the noxious vapors they believed transmitted plague.<sup>129</sup> Municipal councils also provided medical staff with protective clothing. To take one example, the plague surgeon at Nevers was provided with a coat of black cloth, shoes and a hat, among other protective garments, items designed to minimize the contact between their bodies and infected air.<sup>130</sup>

Town councils also worked with physicians to provide patients in plague hospitals with a medically informed diet. In medical thinking of the period, plague was associated with the deficient diet (including both a lack of food and substandard produce) particularly associated with the poor.<sup>131</sup> During the plague outbreak at Bordeaux in 1646, the city's plague physicians advised that fish—a food plague medical writings associated with the poor contracting the disease—filled the body with bad humors.<sup>132</sup> Medical knowledge took priority over religious customs and the *jurats* ruled that the patients and staff of the plague hospital could be given meat during Lent.<sup>133</sup> Red meat formed a key element of the diet given to plague victims as well. During the outbreak of plague which struck Nevers in 1583, the *échevins* purchased 1,821 *livres* of veal and mutton in the month of May alone for the sick in the plague hospital.<sup>134</sup> At Bordeaux, the infected in the plague hospital were provided with a daily diet consisting of large amounts of red meat with bread and wine, as well as eggs.<sup>135</sup> This is comparable to the diets given to plague victims in plague hospitals in Italian cities such as Venice and Florence during this period.<sup>136</sup> As foods such as red meat, eggs, and wine (which were considered important in early modern medicine for avoiding the bad humors associated with illness) often lay beyond the financial means of the poor, plague hospitals played a crucial role in ensuring that these people could receive the diet most suitable for their treatment. Medical explanations of plague emphasized the key role which a good diet and a healthy environment played in preventing the spread of the disease. For the sixteenth-century French physician Ambrose Paré, providing the plague sick with a nourishing diet was crucial to treat the disease.<sup>137</sup> The poor were believed to be especially susceptible to plague because of both their deficient diet and their unhealthy living conditions.<sup>138</sup> At Laon, the plague sick received candles, milk, coal, eggs, salt, juniper, vinegar, verjus, bread, oil, vegetables, and apples.<sup>139</sup> These goods helped provide the infected poor with the materials believed to be most conducive to

treating plague and protecting the medical staff who treated them (for instance, physicians regularly used juniper to prevent the spread of plague). To help create a healthy environment for healing, town councils also provided the poor plague sick with good-quality clothing and bedding.<sup>140</sup> The patients admitted to Bordeaux's plague hospital were given new clothes, feather beds, blankets, and mattresses, which were inspected by members of the city's health board to ensure that they were in good condition.<sup>141</sup>

Yet there could be a gap between the instructions laid down by municipal councils about the conditions of plague hospitals and the reality of the situation, especially during the height of an outbreak. One of the main problems was providing adequate space for patients, and smaller hospitals especially could be quickly overrun. While Grenoble possessed one of the earliest permanent plague hospitals in France, it was small and the beds were soon filled, which meant patients could have to sleep on the ground.<sup>142</sup> Nonetheless, municipal councils sought to respond to such problems quickly, for instance by ordering the construction of new temporary structures to cope with the influx of patients. In October 1586, there were 1,500 people in Grenoble's plague hospital, the bulk of which were treated in the temporary cabins constructed around the permanent building.<sup>143</sup> The construction of additional spaces helped avoid overcrowding and maintain the medical conditions best suited to healing. When Troyes constructed its first plague hospital in 1518 with separate rooms, it was soon full. As such, the town council constructed wooden lodges around the hospital so that they could continue to keep the infected separate.<sup>144</sup> Municipal councils that possessed permanent plague hospitals also maintained these structures outside of plague years to ensure that they remained in a good condition.<sup>145</sup>

### Recovering from Plague

Plague hospitals were principally built to provide the poor with clean and healthy spaces, where they would receive medical treatments and a good-quality diet—all of which was intended to help cure them of plague. While French plague hospitals have been described as “antechambers of death” (“antichambres de la mort”), in fact many of those who entered these institutions survived the disease and returned to society.<sup>146</sup> Indexes of deaths for plague hospitals are difficult to locate before the eighteenth century. The earlier registers I have found (such as at Tours for the 1580s) typically only record admittances and not deaths.<sup>147</sup> Hopefully, further research in municipal and departmental archives will uncover registers of deaths for the sixteenth and seventeenth centuries. In the meantime, we can examine the statistics recorded for the plague hospitals used during the plague of Marseille in 1720–21 to provide an indication of death rates in early modern plague hospitals. These records show that out of the 2403 infected admitted to the city's two plague hospitals, 1086 survived (45.2 percent), which suggests that these institutions played a key role in treating plague.<sup>148</sup> Given that the treatments and methods used in Marseille's plague hospitals in the 1720s are consistent with those employed in plague hospitals across France in earlier centuries, we would probably expect to find similar results for the sixteenth and seventeenth centuries. The statistics from Marseille are also in keeping with the quantitative analysis Samuel Cohn has provided of

death rates for Italy in the late sixteenth century, where the use of a plague hospital significantly lowered a town's mortality rate.<sup>149</sup>

Indeed, it was because significant numbers of people exited plague hospitals that it became necessary for towns to establish secondary institutions, where those who had recovered from the disease were sent to spend their period of convalescence in quarantine before being returned to society.<sup>150</sup> By the late sixteenth century, those who recovered from plague at Orléans were placed in an extramural quarantine center for forty days "to take the air while they recovered" ("pour prendre l'air, en attendant guarison"), with the poor being provided with food during this time.<sup>151</sup> By the mid-seventeenth century, Rouen had both a permanent plague hospital for the infected and a separate institution for those who had survived the disease and were recovering before being returned to the town.<sup>152</sup> At Chambéry, those who had recovered from plague and spent the two weeks in the quarantine center received a signed note from a physician that permitted them to return to the town.<sup>153</sup> These quarantine centers—like the main plague hospitals—often had a medical staff to look after the needs of convalescents. For instance, Chambéry had a barber-surgeon in its quarantine center "for service of the town and [the] relief" of the townspeople who were placed there ("pour le service de la ville et soulagement").<sup>154</sup>

Even those towns which did not develop quarantine centers put in place measures to regulate the return to society of those who had been cured of the disease in the plague hospital. At Nevers and Troyes, patients who recovered the disease and exited the plague hospital were required to undertake a period of quarantine in the fields around the town (with the poor receiving financial support) before being readmitted to society.<sup>155</sup> These actions followed contemporary medical advice regarding plague. As Nevers's *échevins* noted, placing the cured in the open fields around the town exposed them to air which played a key role in the process of disinfecting both people and goods.<sup>156</sup> Certainly, taking the fresh air of the countryside—which was believed to be less noxious than that of the town and thus less associated with disease—was a key medical treatment throughout the early modern period; indeed, many people voluntarily took up residence in the fields around towns as a prophylactic against plague.<sup>157</sup>

Quarantine centers were also used to place people who had been in contact with the sick but were not themselves displaying the symptoms of the disease. While the development of separate institutions for the infected and the suspected can be seen as specific to Italy, numerous French towns employed this system. The earliest French plague hospitals placed the sick alongside those who had contact with them, but by the sixteenth century it became clear that this risked infecting the healthy. When Saint-Flour opened its first plague hospital in 1466, they placed both the infected and those suspected of infection in the structure. Yet by the sixteenth century the town was using a range of confinement centers in addition to the plague hospital.<sup>158</sup> In towns across the kingdom, the infected were brought to the plague hospital but their households and those suspected of being sick were locked up either in a quarantine center or at home.<sup>159</sup> At Troyes, those people who had been in contact with the infected had to remain enclosed in their houses or spend a period quarantined in special lodges constructed outside the city walls.<sup>160</sup> Like the people who had recovered from plague in a plague hospital, those placed in quarantine centers had to remain there for a set number of days (often two weeks) before they were

permitted to leave.<sup>161</sup> This interplay between plague hospitals, confinement centers, and home isolation was intended to provide a comprehensive and effective system focused on both preventing the spread of the disease and helping the infected recover and return to society.

## Conclusion

The emergence of plague hospitals played an important role in the development of professional medical care in French hospitals. Although plague hospitals are often seen as places where the sick were simply left to die, medical care was central to the development of institutions from their earliest days. While the first plague hospital established at Saint-Flour in 1466 was perhaps rudimentary by later standards, it nonetheless employed a professional medical staff, including a surgeon, to treat the sick.<sup>162</sup> Although the Foucauldian “Black Legend” of French hospitals made a deep impression on how historians have characterized these institutions, urban governments poured extensive resources into providing clean and healthy environments, designed using the latest medical ideas, where patients received medical treatment, as well the provision of good diets and access to sanitary and ventilated spaces—all of which were held as medically essential for healing.

Colin Jones has demonstrated how the increased attention the French monarchy paid to the welfare of its soldiers in the seventeenth and eighteenth centuries led to important developments in the expansion of medical care.<sup>163</sup> In a similar way, the increased medical provision French municipal governments made available to poor plague sick from the mid-fifteenth century—especially as a result of the establishment of plague hospitals—played a crucial role the wider provision of medical care in early modern France. In medical thinking of the time, a combination of crowded, smelly, and poorly ventilated housing, a deficient diet and unsanitary water, and a lack of attention from physicians and other medical experts, led plague to focus particularly on infecting the poor.<sup>164</sup> In these circumstances, the need to provide the poorer classes with a specialized building which could meet their medical needs led to the creation of plague hospitals.

Although plague hospitals were a municipal initiative, from the mid-seventeenth century the crown increasingly acted to assert overall control of these institutions. At Amiens, reports that the town council was mismanaging the plague hospital led Louis XIII’s government to send Honoré d’Albret, duke of Chaulnes and governor of Picardy, with two regiments of soldiers to take control of the situation in September 1634.<sup>165</sup> The expansion of the *indendants* in the mid-seventeenth century provided another means for the royal government to assert authority over municipal plague systems. Keeping with Amiens, whereas before 1650 the town council had decided where the plague hospital was to be located, when Paul Barillon was appointed *indendant* of Amiens in 1668, he moved the plague hospital to the *Madelaine*, and when the town council wanted to construct a new plague hospital the following year they had to petition Louis XIV’s royal council for authorization to do so.<sup>166</sup> These efforts were another manifestation of the royal government’s wider aim to exercise control over hospitals and other institutions for the poor in the second half of the seventeenth century, though as Tim McHugh has argued recently, this process

remained highly contested (indeed, the crown depended on municipal councils to continue the day-to-day running of these institutions, often only stepping in directly when, as in Amiens in the 1630s and Marseille in the 1720s, there was a major failure on the part of the urban authorities).<sup>167</sup>

In any case, the royal government was not seeking to devise a new program of plague care. Rather, it was asserting overall authority over the implementation of measures that had been designed and controlled by municipal councils during the previous two centuries. Although the *parlement* of Paris ordered towns to establish health boards against plague in 1631, they had been in operation across the kingdom long before this.<sup>168</sup> It is perhaps unsurprising that the development of plague hospitals—and indeed wider anti-plague measures—came from municipal governments as French towns were nodes for the transmission of knowledge, while cities such as Lyon were publishing centers where medical treatises on plague first appeared.<sup>169</sup> French municipal governments put into practice the ideas regarding the treatment of plague put forward in these texts, with the development of plague hospitals being a key manifestation of the drive toward providing professional medical care to the poor.

### Endnotes

I wish to thank Samuel Cohn and the two anonymous readers for their many helpful and instructive comments on this article. Address correspondence to Neil Murphy, Humanities, Lipman Building, Northumbria University, Newcastle upon Tyne, NE1 8ST, UK. Email: neil.murphy@northumbria.ac.uk.

1. There was, of course, the major plague at Marseille in the 1720s, but after the devastating wider European plague of the 1630s the frequency of major outbreaks in France declined substantially and many regions experienced few or no outbreaks of plague in the second half of the seventeenth century. See the data in: Jean-Noël Biraben, *Les hommes et la peste en France et dans les pays européens et méditerranéens*, 2 vols (Paris, 1975-6), I: 363-74. See also: Guido Alfani, "Plague in Seventeenth-Century Europe and the Decline of Italy: An Epidemiological Hypothesis," *European Review of Economic History* 17 (2013): 408-30.
2. Biraben, *Les hommes et la peste*, II: 169-73. In the most recent study of plague in early modern France, Joël Coste provides a short discussion about how plague hospitals are represented in literary sources: Joël Coste, *Représentations et comportements en temps d'épidémie dans la littérature imprimée de peste, 1490-1725* (Paris, 2007), 622-34.
3. See for instance: Carlo M. Cipolla, *Cristofano and the Plague: A Study in the History of Public Health in the Age of Galileo* (Berkeley, 1973), 27; Guentner Risse, *Mending Bodies, Saving Souls: A History of Hospitals* (New York, 1999), 190, 195; Nicolas Greslou, *La peste en Savoie (aux XVIe et XVIIe siècles)* (Chambéry, 1973), 89; Hilary Ballon, *The Paris of Henri IV: Architecture and Urbanism* (New York, 1991), 166. For a positive assessment of early modern measures to control plague, see: Kirsty Wilson Bowers, *Plague and Public Health in Early Modern Seville* (Rochester, NY, 2013).
4. Jane Stevens Crawshaw, *Plague Hospitals: Public Health for the City in Early Modern Venice* (Farnham, 2012). For pest houses in England, see: Paul Slack, *The Impact of Plague in Tudor and Stuart England* (London, 1985), 45-7.
5. Colin Jones, *The Charitable Imperative: Hospitals and Nursing in Ancien Régime and Revolutionary France* (London, 1989), 11.

6. Michel Foucault, *Naissance de la clinique: une archéologie du regard médical* (Paris, 1963). For historians who followed Foucault's lead, see: John Frangos, *From Housing the Poor to Healing the Sick: The Changing Institution of Paris Hospitals under the Old Regime and Revolution* (London, 1997); David Vess, *Medical Revolution in France, 1789–1796* (Gainsville, 1974). See also: E. H. Ackerknecht, *Medicine at the Paris Hospital 1794–1848* (Baltimore, 1967); Marie-José Imbault-Huart, *L'École pratique de dissection de Paris de 1750 à 1822* (Paris, 1975). For older works emphasising this dismissive view of medical care in early modern French hospitals, see for example: Marcel Fosseyeux, *Une administration parisienne sous l'ancien régime: L'Hôtel-Dieu aux XVIIe et XVIIIe siècles* (1912), 1–93. For religious charity in the Middle Ages, including the operation of hospitals, see: James William Brodman, *Charity & Religion in Medieval Europe* (Washington, 2009).

7. Samuel K. Cohn, *Cultures of Plague: Medical Thinking at the End of the Renaissance* (Oxford, 2009); John Henderson, *The Renaissance Hospital: Healing the Body and Healing the Soul* (New Haven, 2006). See also: Carole Rawcliffe, *The Life, Death and Resurrection of an English Medieval Hospital, St. Giles's, Norwich, c.1249–1550* (Stroud, 1999); Carole Rawcliffe, *The Hospitals of Medieval Norwich* (Woodbridge, 1995).

8. Jones, *Charitable Imperative*; Laurence Brockliss and Colin Jones, *The Medical World of Early Modern France* (Oxford, 1997); Tim McHugh, *Hospital Politics in Seventeenth-Century France: The Crown, Urban Elites and the Poor* (Aldershot, 2007). See also: Daniel Hickey, *Local Hospitals in Ancien Régime France: Rationalization, Resistance, Renewal, 1530–1789* (Montreal, 1997); Cissie Fairchild, *Poverty and Charity in Aix-en-Provence, 1640–1789* (Baltimore, 1976); Pascal Even, *Les hôpitaux en Aunis et Saintogne sous l'Ancien Régime* (Aunis, 2002); Patrice Cugnetti, *L'hôpital de Grenoble des origines à la fin du Second Empire (XIe siècle-1870)* (Grenoble, 1980); Kathryn Norberg, *Rich and Poor in Grenoble, 1600–1814* (London, 1985).

9. Colin Jones, "The Construction of the Hospital Patient in Early Modern France," in *Institutions of Confinement: Hospitals, Asylums, and Prisons in Western Europe and North America, 1500–1950*, ed. Norbert Finzsch and Robert Jütte (Cambridge, 1997), 61.

10. For the severity of the plague of the 1630s, see: Alfani, "Plague in Seventeenth-Century Europe."

11. Colin Jones, "Plague and its Metaphors in Early Modern France," *Representations* 53 (1996): 116.

12. Crawshaw, *Plague Hospitals*, 3. For the establishment of plague hospitals across Europe, see: Risse, *History of Hospitals*, 203; Crawshaw, *Plague Hospitals*, 21–3; Biraben, *Hommes*, II: 171–2.

13. For Italy, see: Cohn, *Cultures of Plague*.

14. For alternatives to the Italian model of plague care, see: Sandra Cavallo, *Charity and Power in Early Modern Italy: Benefactors and their Motives in Turin, 1541–1789* (Cambridge, 1995); Kirsty Wilson Bowers, "Balancing Industrial and Communal Needs: Plague and Public Health in Early Modern Seville," *Bulletin of the History of Medicine* 81 (2007): 335–78, and Neil Murphy, "Plague Ordinances and the Management of Infectious Diseases in Northern French Towns," c.1450–c.1560," in *The Fifteenth Century XII: Society in an Age of Plague*, ed. Linda Clark and Carole Rawcliffe (Woodbridge, 2013), 139–59.

15. Sylvette Guilbert, "À Châlons-sur-Marne au XVe siècle: un conseil municipal face aux épidémies," *Annales. Histoire, Sciences Sociales* 6 (1968): 1293.

16. Archives Départementales (hereafter AD) Seine-Maritime 3E, Archives Communales (hereafter AC) Rouen A 11, fol. 271r.

17. Even the Saint-Louis plague hospital constructed at Paris in the early seventeenth century as a royal foundation was run by the city's *hôtel-Dieu*, which had come under municipal control in the early sixteenth century: Ballon, *Paris of Henry IV*, 176.

18. AM Amiens BB 22, fol. 30r; Émile Rubin, ed., *Registres consulaires de la ville de Limoges*, 3 vols (Limoges, 1867-84), III: 277, 372.

19. Louis de Gouvenain, *Ville de Dijon. Inventaire sommaire des archives communales antérieures à 1790*, 5 vols (Dijon, 1867-1910), II: 59.

20. Alexandre Tuetey, ed., *Registres de délibérations du Bureau de la ville de Paris. Tome deuxième, 1527-1539* (Paris, 1886), 135, 179. It was also noted that the nurses of the *Hôtel-Dieu* at Paris who tended to plague victims "are tender and delicate and cannot endure the foul air and became sick and died like the others" ("sont tendres et delicatz, ne peuvent endurer le gros aer qui y est, et deviennent mallades et meurent commes les autres"): *Registres de délibérations, Paris, 1527-1539*, 179. See also: Achille Chéreau, ed., *Les ordonnances faictes et publiées à son de trompe par les carrefours de ceste ville de Paris pour éviter le dangier de peste 1531* (Paris, 1873).

21. Elma Brenner, *Leprosy and Charity in Medieval Rouen* (Woodbridge, 2015), 87-9.

22. Matton, *Inventaire sommaire, Laon*, 16, 18, 23, 24, 85, 88; Fleury, "Laon," 148.

23. McHugh, *Hospital Politics*, 60, 66.

24. G. Boudon, "Le Règlement de l'Hôtel-Dieu de Paris en 1580," *Bulletin de la Société de l'histoire de Paris et de l'Île-de-France* 30 (1903), 143.

25. François Bonnardot, ed., *Registres de délibérations du Bureau de la ville de Paris. Tome premier, 1499-1526* (Paris, 1883), 146; AD Seine-Maritime 3E, AC Rouen A 9, fol. 171r. Yet other towns expelled syphilitics: François Boutillier, *Ville de Nevers. Inventaire sommaire des archives communales antérieures à 1790* (Nevers, 1876), 38; Archives Municipales (hereafter AM) Lyon BB 23, fol. 51v.

26. Paul Guérin, ed., *Registres de délibérations du Bureau de la ville de Paris. Tome huitième, 1576-1586* (Paris, 1896), V: 228; AM Nantes AA 5/39. See also: AM Nantes AA 5/44.

27. These links between plague and poverty have been most fully studied for Italy: Anne Carmichael, *Plague and the Poor in Renaissance Florence* (Cambridge, 1986); Cohn, *Cultures of Plague*, 208-37; Crawshaw, *Plague Hospitals*, 79-108; John Henderson, *Florence Under Siege: Surviving Plague in an Early Modern City* (New Haven, 2019), 51-117; Brian Pullan, "Plague and Perceptions of the Poor in Early Modern Italy," in *Epidemics and Ideas: Essays on the Historical Perception of Pestilence*, ed. Terence Ranger and Paul Slack (Cambridge, 1992): 101-24; Kevin Siena, "Poor Bodies and Disease," in *The Routledge History of Poverty, c. 1450-1800*, ed. David Hitchcock and Julia McClure (London, 2020).

28. AM Troyes G907.

29. Henri Bon, *Essai historique sur les épidémies en Bourgogne* (Dijon, 1912), 38, 44. This combination of plague hospitals and home treatment was used in other parts of Europe: Kira L. S. Newman, "Shutt Up: Bubonic Plague and Quarantine in Early Modern England," *Journal of Social History* 45 (2012): 809-34 (esp. 812-13); Crawshaw, *Plague Hospitals*, 71.

30. *Trois opuscules sur la peste de Rouen de 1668*, ed. G. Panel (Rouen, 1861), xiii.

31. For housing and medical tracts on plague, see: Cohn, *Cultures of Plague*, 218-2. For healing and diet, see: Marilyn Nicoud, *Les régimes de santé au Moyen Age. Naissance et diffusion d'une écriture médicale en Italie et en France (XIIIe-XVe siècle)* (Rome, 2007), 281-

524; Marilyn Nicoud, "L'alimentation, un risque pour la santé? Discours médical et pratiques alimentaires au Moyen Âge," *Médiévales* 69 (2015): 149–70.

32. Ballon, *Paris of Henry IV*, 124. Similarly, at Lille by the late seventeenth century all the infected—rich and poor—were instructed to go to the plague hospital: Aristote Crapet, "La vie à Lille, de 1667 à 1789, d'après le cours de M. de Saint-Léger," *Revue du Nord* 23 (1920): 207.

33. *Registres de délibérations, Paris, 1576–1586*, 28; AD Seine-Maritime 3E, AC Rouen A 21, fol. 73r; AM Narbonne BB 5, fol. 463r; Dast Le Vacher de Boisville, *Inventaire sommaire des registres de la Jurade 1520 à 1783*, 4 vols (Bordeaux, 1896), I: 528, 533, 542, 564; Boutillier, *Inventaire sommaire, Nevers*, 53, 72; Boutiot, *Troyes*, 6–7, 16–18. This was also the case in Rome in the mid-seventeenth century: Risse, *History of Hospitals*, 201.

34. AD Seine-Maritime 3E, AC Rouen 20, fol. 78v.

35. Boutiot, *Troyes*, 30.

36. AM Narbonne BB 5, fol. 469v.

37. Ballon, *Paris of Henry IV*, 171.

38. Boutiot, *Troyes*, 32–3.

39. Boutillier, *Inventaire sommaire, Nevers*, 72–3.

40. AM Aix-en-Provence AA 1, BB 34, fol. 30, BB 61, fol. 4; AD Gers 1Edépôt, AC Auch BB 5, fol. 182r; G. Charrier, ed., *Les jurades de la ville de Bergerac tirées des registres de l'Hôtel de ville*, 4 vols (Bergerac, 1892–1904), IV: 274–6.

41. Renaud Rose, *Ville de Beauvais. Inventaire sommaire des archives communales antérieures à 1790* (Beauvais, 1887), 30; AM Narbonne BB 23, fol. 227r.

42. F. Dissard, *La Réforme des hôpitaux et maladeries au XVIIe siècle* (Paris, 1938).

43. Fernand Sauve, "Les epidemies de peste à Apt notamment en 1588 et 1720–1721," *Annales de la Société d'études provençales* (1905): 46; *Inventaire sommaire, Dijon*, II: 55; Édouard Fleury, "La Peste dans les diocèses de Laon et de Soissons," *Bulletin de la Société académique de Laon* 21 (1874): 131; Joseph Garnier, "Notice historique sur la maladière de Dijon," *Memoires de l'Academie des Sciences Arts et Belles-Lettres de Dijon*, 2<sup>nd</sup> series, 2 (1852–3): 57; Biraben, *Hommes*, II: 172.

44. Risse, *History of Hospitals*, 203–4. On the apparent conceptual links between plague and leprosy, see also: Richard J. Palmer, "The Church, Leprosy and the Plague in Medieval and Early Modern Europe," *Studies in Church History* 19 (1982): 79–101. For the use of leper houses as plague hospitals in Italy, see: Crawshaw, *Plague Hospitals*, 20.

45. Risse, *History of Hospitals*, 181–2.

46. Brenner, *Leprosy and Charity*, 91–9.

47. For religious buildings being transformed into plague hospitals, see: AD Seine-Maritime 3E, AC Rouen A 11, fol. 271r; AM Amiens BB 36, fol. 159r, BB 61, fol. 141v, BB 62, fols. 35r, 39v, 50r; Boutillier, *Inventaire sommaire, Nevers*, 50, 54, 68.

48. Boudet and Grand, *Epidémies*, 100–1.

49. Henderson, *Florence Under Siege*, 18.

50. For the construction of the plague hospital at Brou between 1472 and 1476, see: AC Bourg-en-Bresse Hdépôt 3A1.

51. Boutillier, *Inventaire sommaire, Nevers*, 72–3; Ballon, *Paris of Henry IV*, 178.



52. AM Narbonne BB 14, fols. 463r, 481r, 487v, BB 15, fol. 15v. Similar claims for compensation were raised again in 1652–3: AM Narbonne BB 23, fols. 143r, 227r, 336r, 415r, BB 25, fol. 437r.
53. AC Bourg-en-Bresse BB 14, fols. 33r–33v.
54. AD Seine-Maritime 3E, AC Rouen A 9, fols. 142r, 144r, 166v; Boutillier, *Inventaire sommaire*, Nevers, 73; Boudet and Grand, *Epidémies*, 58.
55. AM Lyon BB 117, fols. 218r–219v; Boutiot, Troyes, 18; Le Vacher de Boisville, *Registres de la Jurade*, I: 537, 542–3; AM Narbonne BB 23, fol. 240r; Ferdinand Chavant, *La peste à Grenoble 1410–1643* (Paris, 1903), 8; AM Amiens BB 62, fol. 242v.
56. See for example the use of those at Chambéry and Troyes: Greslou, *Peste en Savoie*, 85; Boutiot, Troyes, 18.
57. Richard J. Palmer, “The Control of Plague in Venice and Northern Italy, 1348–1600” (PhD thesis, University of Kent, 1978), 195; Crawshaw, *Plague Hospitals*, 90–1.
58. AC Mâcon BB 21, 120v, BB 26, fol. 50r.
59. AC Bourg-en-Bresse BB 22, fol. 250r.
60. AD Seine-Maritime 3E, AC Rouen A 16, fol. 327v.
61. AD Seine-Maritime 3E, AC Rouen A 20, fol. 78r.
62. Henderson, *Florence Under Siege*, 111–12.
63. AD Seine-Maritime 3E 1, AM Rouen A 16, fol. 312.
64. AM Amiens BB 62, fols. 50r, 52r. For the quality of air determining the location of plague hospitals, see also: Boutiot, Troyes, 32–3. In the 1580s, the physicians who advised Amiens on the best location for a plague hospital also designed the hospital: AM Amiens BB 45, fols. 45r, 49r. On air, wind direction and the design of buildings, see: Guy Geltner, *Roads to Health: Infrastructure and Urban Wellbeing in Later Medieval Italy* (Philadelphia, 2019), 234–6.
65. Ballou, *Paris of Henry IV*.
66. Henderson, *Florence Under Siege*, 197–8; Crawshaw, *Plague Hospitals*, 71–77.
67. Baltazar Du Huval, *Discours et sommaire recueil de plusieurs personnes guaries de la maladie contagieuse, appelée vulgairement peste. Contenant plusieurs moyens methodics pratiqués & expérimentez pour se préserver & armer contre icelle* (Paris, 1583), fol. 38v.
68. François Valleriolo, *Traicté de la peste* (Lyon, 1566), 103–9. For this text, see also: Coste, *Représentations*, 741.
69. Carole Rawcliffe, “Delectable Sights and Fragrant Smells: Gardens and Health in Late Medieval and Early Modern England,” *Garden History* 36 (2008): 3–22. For the *Regimen sanitatis*, see: C. A. Bonfield, “The *Regimen sanitates* and its dissemination in England, c.1348–c.1550” (PhD thesis, University of East Anglia, 2006).
70. AM Amiens, BB 22, fol. 30r.
71. AD Seine-Maritime 3E, AC Rouen A16, fol. 324r, A20, fols. 156r, 223r. For the use of gardens as locations for plague hospitals, see also: AM Narbonne BB 1, fols. 179r, 277v; M. J. Sahuc, *Ville de Saint-Pons. Inventaire sommaire des archives communales antérieures à 1790* (Montpellier, 1895), 3; Vacher de Boisville, *Registres de la Jurade*, I: 550; Greslou, *Peste en Savoie*, 85; Fleury, “Laon”: 163.

72. Cohn, *Cultures of Plague*, 215–18. For French literature and medical treatises on plague, see: Coste, *Représentations*; Jones, “Plague and its Metaphors”; Colin Jones, “Languages of Plague in Early Modern France,” in *Body and City: Histories of Urban Public Health*, ed. Sally Sheard and Helen Power (London, 2000): 41–9. For water and disease, see: Elma Brenner, “Regulating Water Sources in the Towns and Cities of Late Medieval Normandy,” in *Policing the Urban Environment in Pre-Modern Europe*, ed. Carole Rawcliffe and Claire Weeda (Amsterdam, 2020): 207–30; Geltner, *Roads to Health*, 41–65.
73. Valleriole, *Traicté de la peste*, 106.
74. AM Lyon BB 135, fol. 166r.
75. AD Seine-Maritime 3E, AC Rouen A 11, fols. 119r, 130r. Although it seems that Rouen did not construct a plague hospital in 1518 as in March the following year they were still discussing where to build “a hospital to place and receive the poor sick from the plague” (“ung ospital pour mectre et receuillir les povres malades de la maladie de peste”): AD Seine-Maritime 3E, AC Rouen A 11, fol. 271r.
76. Ferdinand Chavant, *La peste à Grenoble 1410-1643* (Paris, 1903), 6.
77. Boutillier, *Inventaire sommaire, Nevers*, 72.
78. For flooding and plague, see: Cohn, *Cultures of Plague*, 216.
79. AM Amiens BB 45, fol. 49r.
80. AM Amiens BB 45, fol. 49r.
81. AM Amiens BB 62, 198v.
82. *Trois opuscules sur la peste de Rouen de 1668*, ed. G. Panel (Rouen, 1861), x–xi.
83. Boutiot, *Troyes*, 46. In the 1640s, new plans were put forward by Gaspard Chevalier, the head of Lyon’s health board, to the city’s plague hospital which had last been altered over a century earlier: AM Lyon BB 198, fols. 69r–70r, 140r.
84. Crawshaw, *Plague Hospitals*, 66. For wards, see also: Annemarie Kinzelbach, “Hospitals, Medicine and Society: Southern German Imperial Towns in the Sixteenth Century,” *Renaissance Studies* 15 (2001): 217–28.
85. Ballon, *Paris of Henry IV*, 178.
86. O. du Mesnil, “La peste à Dieppe (1558-1676),” *Annales d’hygiène publique et de médecine légale* 38 (1897): 166.
87. AM Grenoble BB 8, fol. 139v.
88. For physicians, see: Jean Imbert, *Les hôpitaux en droit canonique du décret de Gratien à la sécularisation de l’administration de l’Hôtel-Dieu de Paris en 1505* (Paris, 1947), 158–60; Andrew W. Russell, ed., *The Town and State Physician in Europe from the Middle Ages to the Enlightenment* (Wolfenbüttel, 1981); Richard J. Palmer, “Physicians and surgeons in sixteenth-century Venice,” *Medical History* 23 (1979): 451–60; Katharine Park, *Doctors and Medicine in Early Renaissance Florence* (Princeton, 1985), 151–87. For physician-patient relations in early modern France, see: Joël Coste, “Les relations entre médecins et malades dans les consultations médicales françaises (milieu XVI<sup>e</sup> siècle-début XIX<sup>e</sup> siècle),” in *Les relations médecin-malade des temps modernes à l’époque contemporaine*, ed. Élisabeth Belmas and Serenella Nonnis-Vigilante (Villeneuve d’Ascq, 2008), 23–48.
89. AC Bourg-en-Bresse BB 18, fol. 32r; Émile Chanel, “Une année de famine et de peste à Bourg (1572-1573),” *Bulletin de la Société des naturalistes de l’Ain* 27 (1910): 21.
90. *Trois opuscules*, xi–xii.

91. See this point for Italy: Henderson, *Florence Under Siege*, 114.
92. Cited in: Monique Lucenet, *Lyon malade de la peste* (Palaiseau, 1981), 106.
93. Jean Cottin, *Traité de la peste faite en faveur de la ville de Laon* (Paris, 1721) cited in Brockliss and Jones, *Medical World*, 356.
94. Cohn, *Cultures of Plague*, 75.
95. For surgeons, see: Sandra Cavallo, *Artisans of the Body in Early Modern Italy: Identities, Families and Masculinities* (Manchester, 2007); Celeste Chamberland, "Honor Brotherhood, and the Corporate Ethos of London's Barber-Surgeons' Company, 1570-1640," *Journal of the History of Medicine and Allied Sciences* 64 (2009): 300-32; Annemarie Kinzelbach, "Erudite and Honoured Artisans? Performers of Body Care and Surgery in Early Modern German Towns," *Social History of Medicine* 27 (2014): 668-88.
96. Sabine Sander, *Handwerkschirurgen. Sozialgeschichte einer verdrängten Berufsgruppe* (Göttingen, 1989), 122-4.
97. On this point, see: Crawshaw, *Plague Hospitals*, 155. Vivian Nutton, "Humanist Surgery," in *The Medical Renaissance of the Sixteenth Century*, ed. A. Wear, R. K. French and L. M. Lonie (Cambridge, 1985): 75-100; Palmer, "Physicians and Surgeons"; Cavallo, *Artisans of the Body*. For difficulties around the term doctor, see: Henderson, *Renaissance Hospital*, 226-30.
98. Du Huval, *Discours et sommaire*, fols. 38r-40r.
99. Le Vacher de Boisville, *Registres de la Jurade, Bordeaux*, I: 567-8.
100. *Trois opuscules*, xiv. See also: François Hüe, ed., *La communauté des chirurgiens de Rouen: chirurgiens, barbiers- chirurgiens, collège de chirurgie, 1407-1791* (Rouen, 1913), 82-3.
101. Lucenet, *Lyon*, 105,
102. Le Vacher de Boisville, *Registres de la Jurade, Bordeaux*, I: 568. For the normal limits on what French surgeons and barber-surgeons could do, see: Alexandre Germain, *Les Maitres Chirugiens de l'Ecole de chirurgie de Montpellier* (Montpellier, 1880).
103. Alcius Ledieu, *Ville d'Abbeville. Inventaire sommaire des archives municipales antérieures à 1790* (Abbeville, 1902), 126-7.
104. Le Vacher de Boisville, *Registres de la Jurade, Bordeaux*, I: 544. Yet just eight days after entering the plague hospital Laporte died from the disease and the *jurats* had to look for a new surgeon: In early November 1629, Jean Mandraille, *compagnon chirurgien*, offered to enter the plague hospital in Delaporte's place, receiving also 75 livres per month and a promotion to master surgeon when he left: Le Vacher de Boisville, *Registres de la Jurade, Bordeaux*, I: 545. For discussions with master surgeons about plague surgeons, see: AM Marseille GG 244.
105. *Trois opuscules*, xiii.
106. McHugh, *Hospital Politics*, 68; Fosseyeux, *Hotel Dieu*, 401; T. Gelfand, *Professionalizing Modern Medicine: Paris Surgeons and Medical Science and Institutions in the Eighteenth Century* (Westport, 1980), 26.
107. See for instance: Le Vacher de Boisville, *Registres de la Jurade, Bordeaux*, I: 526.
108. Boutillier, *Inventaire sommaire, Nevers*, 72, 73.
109. AM Narbonne BB 5, fol. 469v; Auguste Matton, *Ville de Laon. Inventaire sommaire des archives communales antérieures à 1790* (Laon, 1889), 2; Fleury, "Laon," 166.

110. AC Bourg-en-Bresse BB 16, fols. 171r-172v, Hdépôt 4 A 8.
111. For diagnosing plague, see: Cohn, *Cultures of Plague*, 39–76; J. Revel, “Autour d’une peste ancienne: la peste de 1666-70,” *Revue d’histoire moderne et contemporaine* 17 (1970), 955-6. These types of medical diagnosis were being implemented more widely in some French towns by the end of the fifteenth century, particularly Montpellier which was the location for one of Europe’s leading medical faculties: Geneviève Dumas, *Santé et société à Montpellier à la fin du Moyen Âge* (Leiden, 2015).
112. Sauve, “Peste à Apt,” 45.
113. Lucenet, *Lyon*, 106–7.
114. Ballou, *Paris of Henry IV*, 124.
115. Le Vacher de Boisville, *Registres de la Jurade, Bordeaux*, I: 540–1, 562, 564, 575, 577. For physicians at Bordeaux identifying plague, see: Laurent Coste, “Bordeaux et la peste dans la première moitié du XVIIe siècle,” *Annales du Midi* 110 (1998): 462.
116. Le Vacher de Boisville, *Registres de la Jurade, Bordeaux*, I: 537.
117. See for instance: Chavant, *Peste à Grenoble 1410-1643*, 8; Le Vacher de Boisville, *Registres de la Jurade, Bordeaux*, I: 39.
118. Le Vacher de Boisville, *Registres de la Jurade, Bordeaux*, I: 537, 564, 572.
119. Le Vacher de Boisville, *Registres de la Jurade, Bordeaux*, I: 564. For women treating the infected, see also: Boutillier, *Inventaire sommaire, Nevers*, 68. For women working in plague hospitals, see Crawshaw, *Plague Hospitals*, 161-2; Jane Stevens Crawshaw, “The Beasts of Burial: *Pizzagamorti* and Public Health for the Plague in Early Modern Venice,” *Social History of Medicine* 24 (2011): 570–87. For women and early modern healthcare more widely, see: Susan Broomhall, *Women’s Medical Work in Early Modern France* (Manchester, 2004); Leigh Ann Waley, *Women and the Practice of Medical Care in Early Modern Europe, 1400-1800* (London, 2011); *Special Issue: Women and Healthcare in Early Modern Europe*, *Renaissance Studies* 28 (2014).
120. On this point for Florence’s plague hospital, see: Henderson, *Florence Under Siege*, 113-14. For women as nurses in hospitals, see: Broomhall, *Women’s Medical Work*, 71-95; Monica H. Green, *Making Women’s Medicine Masculine: The Rise of Male Authority in Pre-Modern Gynaecology* (Oxford, 2008), 125–6.
121. Boutillier, *Inventaire sommaire, Nevers*, 68.
122. *Trois opuscules*, xv.
123. AM Lyon BB 53, fol. 149r; AM Narbonne BB 5, fol. 408v. For town councils obtaining drugs for the inmates of plague hospitals, see also: Matton, *Inventaire sommaire, Laon*, 28, 90; AM Lyon CC 156; AM Narbonne BB 18, fol. 148r.
124. Boutillier, *Inventaire sommaire, Nevers*, 72.
125. E. Rolants, ed., “Les remèdes employés à Lille contre la peste au début du XVIIe siècle,” *Revue d’histoire et de la pharmacie* 77 (1932), 37–9.
126. Boutillier, *Inventaire sommaire, Nevers*, 72.
127. Du Huval, *Discours et sommaire*, 39v.
128. Le Vacher de Boisville, *Registres de la Jurade, Bordeaux*, I: 545. For drugs, see also: Le Vacher de Boisville, *Registres de la Jurade, Bordeaux*, I: 543–5, 556, 564–5; Boutillier, *Inventaire sommaire, Nevers*, 53.

129. AD Vaucluse, AC Avignon AA 23. For vinegar as a disinfectant for plague, see: Cohn, *Cultures of Plague*, 231.
130. Boutillier, *Inventaire sommaire*, Nevers, 72. For dress, see: Henderson, *Florence Under Siege*, 108; Risse, *History of Hospitals*, 193.
131. Cohn, *Cultures of Plague*, 215.
132. For fish and plague, see: Cohn, *Cultures of Plague*, 215, 218.
133. Le Vacher de Boisville, *Registres de la Jurade, Bordeaux*, I: 575. The plague hospital at Bordeaux in the seventeenth century also had a specific official to control the provisions given to the sick: Le Vacher de Boisville, *Registres de la Jurade, Bordeaux*, I: 545. For diet, see also: Greslou, *Peste en Savoie*, 97–9.
134. Boutillier, *Inventaire sommaire*, Nevers, 73.
135. Le Vacher de Boisville, *Registres de la Jurade, Bordeaux*, I: 586. For the diet given to the plague sick at Bordeaux, see also: Le Vacher de Boisville, *Registres de la Jurade, Bordeaux*, I: 537, 539, 550.
136. Henderson, *Florence Under Siege*, 136, 203; Crawshaw, *Plague Hospitals*, 136–43; Cipolla, *Cristofano*, 148–51; Cohn, *Cultures of Plague*, 278–9.
137. Ambroise Paré, *Traicté de la peste, de la petite verolle & rougeolle: avec une briefve description de la lepre* (Paris, 1568), 93–106.
138. Crawshaw, *Plague Hospitals*, 98–9.
139. Matton, *Inventaire sommaire*, Laon, 98. For the diet given to the poor plague victims at Laon, see also: Fleury, “Laon,” 147.
140. See, for instance: Boutillier, *Inventaire sommaire*, Nevers, 50, 68, 72.
141. Le Vacher de Boisville, *Registres de la Jurade, Bordeaux*, I: 564, 574. Linen was important for medical care as it was seen not to irritate diseased skin: Brenner, *Leprosy and Charity*, 98.
142. Chavant, *Peste à Grenoble*, 8.
143. Chavant, *Peste à Grenoble*, 8.
144. Boutiot, *Troyes*, 18.
145. See for instance: AC Narbonne BB 20, fol. 83r, BB 23, fol. 143r.
146. Greslou, *Peste en Savoie*, 89.
147. AM Tours GG 2.
148. Carrière, Courdurié and Rebuffat, *Marseille*, 107.
149. Cohn, *Cultures of Plague*, 22.
150. Le Vacher de Boisville, *Registres de la Jurade, Bordeaux*, I: 585.
151. Camille Bloch et al, *Ville d'Orléans. Inventaire sommaire des archives communales antérieures à 1790* (Orléans, 1907), 130.
152. *Trois opuscules*, x-xi.
153. Greslou, *Peste en Savoie*, 91–2.
154. Cited in Greslou, *Peste en Savoie*, 85.
155. Boutillier, *Inventaire sommaire*, Nevers, 72; Guilbert, “Conseil municipal,” 1293.

156. Boutillier, *Inventaire sommaire, Nevers*, 72.
157. In some towns there was a secondary housing market with people renting homes in the surrounding region they could relocate to during times of plague: Bernard Chevalier, *Tours ville royale (1356–1520). Origine et développement d'une capitale à la fin du Moyen Age* (Paris, 1975), 525.
158. Boudet and Grand, *Epidémies*, 58, 101–3.
159. AM Amiens BB 25, fol. 106r, BB 25, fols. 11v, 114r, GG 1118; *Trois opuscules*, xvi–xvii; Greslou, *Peste en Savoie*, 84–5; Le Vacher de Boisville, *Registres de la Jurade, Bordeaux*, I: 533, 538, 542, 565; Boutillier, *Inventaire sommaire, Nevers*, 53, 72; *Jurades de la ville de Bergerac*, vol. 1, 88; Boutiot, *Troyes*, 6–7, 16–18.
160. Boutiot, *Troyes*, 35.
161. See for instance: Le Vacher de Boisville, *Registres de la Jurade, Bordeaux*, I: 575; Boutiot, *Troyes*, 35.
162. Boudet and Grand, *Epidémies*, 58.
163. Jones, *Charitable Imperative*, 209–40; Colin Jones, “The Welfare of the French Foot Soldier,” *History* 65 (1980): 193–213.
164. Cohn, *Cultures of Plague*, 221–2.
165. AM Amiens AA 60. These problems continued into 1635 and the struggle between town and crown continued: AM Amiens AA 61.
166. AM Amiens GG 1136. This was timely as a contagious illness broke out in the town in the following year: AM Amiens GG 1137. For Barillon as *intendant* of Amiens, see: Richard Bonney, *Political Change in France under Richlieu and Mazarin 1624–1661* (Oxford, 1978), 156–7.
167. Fairchild, *Poverty and Charity*; Hickey, *Local Hospitals*; Norberg, *Rich and Poor*; Emmanuel Chill, “Religion and Mendacity in Seventeenth-Century France,” *International Review of Social History* 7 (1962): 400–25; J.-P. Gutton, *La société et les pauvres. L'exemple de la généralité de Lyon, 1534–1789* (Paris, 1971); McHugh, *Hospital Politics*.
168. Brockliss and Jones, *Medical World*, 351.
169. Indeed, Valleriole's *Traicté de la peste*, which contained a description of the ideal plague hospital and which was addressed to the municipal council of Arles, was published at Lyon in 1566: Valleriole, *Traicté de la peste*. For plague tracts published by physicians at Lyon during this period, see also: Claude de Rubys, *Discours sur la contagion de peste qui a esté ceste presente annee en la ville de Lyon, contenant les causes d'icelle, l'ordre, moyen et police tenue pour en purger, nettoyer et delivrer la ville* (Lyon, 1577).